ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. #0006963
CSSTP-0006-00(963)
GDOT District 3 - Thomaston
Peach County
SR 49 Connector Extension from SR 49 Connector to SR 96

OFFICE Design Policy & Support

DATE February 1, 2011

FROM for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT **APPROVED CONCEPT REPORT**

Attached is the approved Concept Report for the above subject project.

Attachment

DISTRIBUTION:

Genetha Rice-Singleton, Program Control Administrator
Bobby Hilliard, State Program Delivery Engineer
Cindy VanDyke, State Transportation Planning Administrator
Angela Robinson, Financial Management Administrator
Glenn Bowman, State Environmental Administrator
Ben Rabun, State Bridge Engineer
Kathy Zahul, State Traffic Engineer
Georgene Geary, State Materials & Research Engineer
Ron Wishon, State Project Review Engineer
Jeff Baker, State Utilities Engineer
Ken Thompson, Statewide Location Bureau Chief
Michael Henry, Systems & Classification Branch Chief
David Millen, District Engineer
Bill Rountree, District Preconstruction Engineer
Kerry Gore, District Utilities Engineer
Stanley Hill, Project Manager
BOARD MEMBER - 2nd Congressional District

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

Project Number: CSSTP-0006-00(963)
County: Peach
P. I. Number: 0006963
Federal Route Number: N/A
State Route Number: N/A

SR 49 CONNECTOR EXTENSION
FROM SR 49 CONNECTOR TO SR 96

Submitted for approval:

DATE 11/4/10 — State Design Policy Engineer

DATE 10/26/2010 — Location Bureau Chief

DATE 10/26/2010 — Project Manager

Recommendation for approval:

DATE 11/10/2010 — GENETHA RICE-SINGLETON T.J. (RECOMMENDATION ON FILE)
Program Control Administrator

DATE 11/22/2010 — GLENN BOWMAN T.J. (RECOMMENDATION ON FILE)
State Environmental Administrator

DATE 11/15/2010 — KATHY ZAHUL T.J. (RECOMMENDATION ON FILE)
State Traffic Engineer

DATE 11/5/2010 — RON WISHON T.J. (RECOMMENDATION ON FILE)
Project Review Engineer

DATE 11/8/2010 — JEFF BAKER T.J. (RECOMMENDATION ON FILE)
State Utilities Engineer

DATE _____ — District Engineer – Thomaston

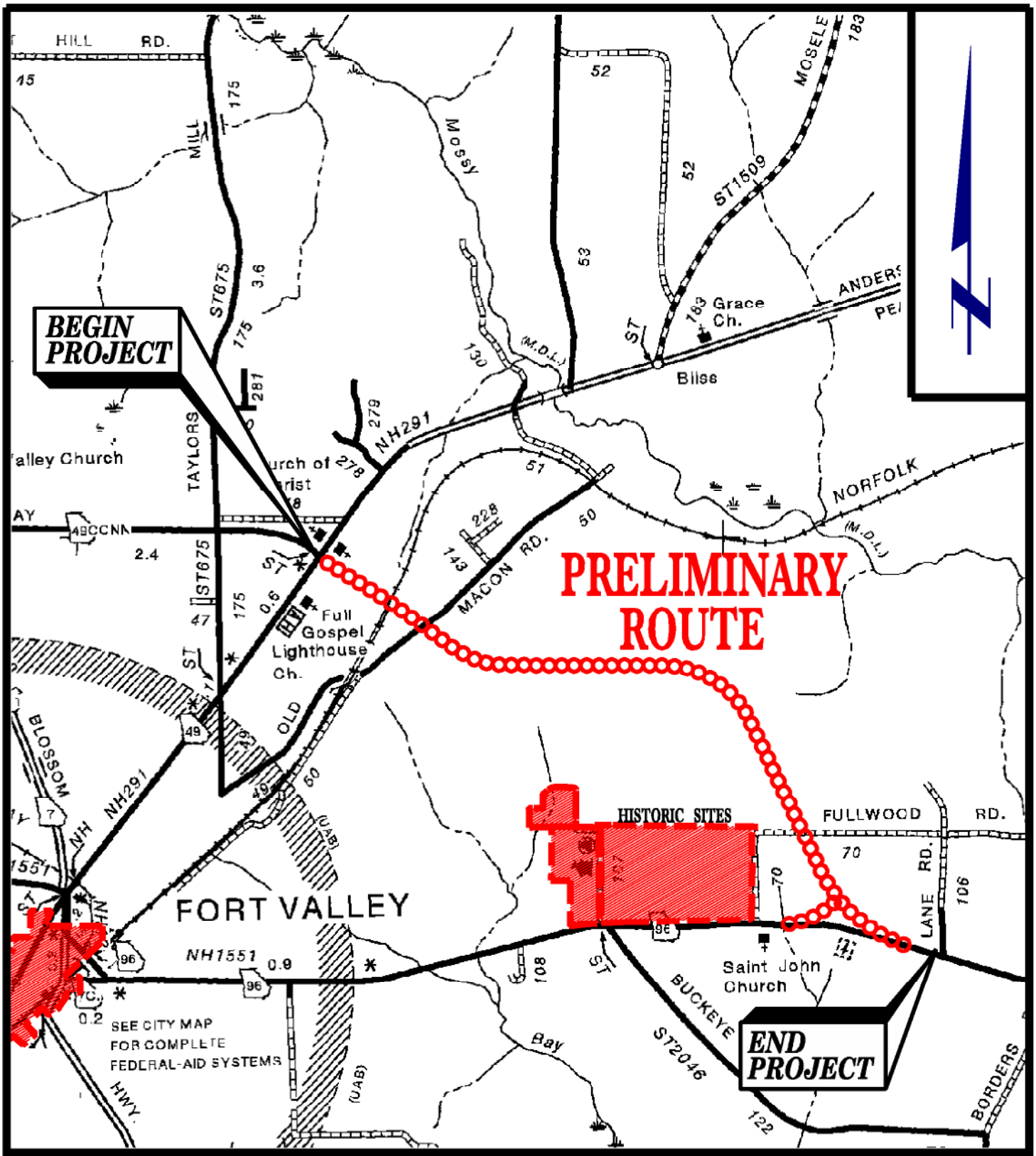
DATE 1/12/2011 — BEN RABUN T.J. (RECOMMENDATION ON FILE)
Bridge Design Administrator

DATE _____ — State Transportation Financial Management Administrator

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

* DATE 11/12/10 — State Transportation Planning Administrator

Project was included in a previous STIP & is in the current LRTP, Phase will be added to current/future STIP as funding & need become available upon approval by the Director of Planning. The project description in the LRTP, as appropriate, may be modified to reflect the concept report upon approval.



P.I.# 0006963

CSSTP–0006–00(963)
SR 49 CONNECTOR EXTENSION
PEACH COUNTY

SOURCE: GENERAL HIGHWAY MAP, PEACH CO., GEORGIA
PREPARED BY THE GEORGIA DEPARTMENT OF TRANSPORTATION, 2007

Need and Purpose:

There is a need for a more expedient east-west travel corridor for commercial freight, regional public, and military vehicles in the Fort Valley area. SR 96 is part of a major east-west travel corridor from Georgia's coastal ports and Fort Stewart near Savannah to Fort Benning near Columbus, Alabama, and Mississippi via I-16, SR 96, and SR 22/US 80. Currently, east-west travel on SR 96 through Fort Valley requires vehicle operators to negotiate a five-way intersection, cross the SR 96 humpback railroad bridge, and travel through stop condition turns on both sides of the bridge. The bridge approaches also have significant grades that present challenges for freight trucks and military vehicles. As a result, military vehicles and large trucks typically use SR 49 Connector and SR 49.

There is also a need to relieve traffic congestion in Fort Valley. US 341/SR 7, SR 49, and SR 96 all converge in Fort Valley at a five-way intersection that is a traffic bottleneck. The Blue Bird Bus and Wonderlodge Motorhome manufacturing plants are located just north of the five-way intersection on SR 49, and are major contributors to the Fort Valley traffic congestion during morning and evening peak hours.

The purpose of the project is to address the identified needs by providing a more expedient alternative to existing SR 96 through Fort Valley. The proposed project would connect SR 96 east of Fort Valley to the SR 49 Connector north of Fort Valley. The SR 49 Connector is a 4 lane, 55 mph facility that connects SR 49, SR 7/US 341, and SR 96. The project would also address identified needs by reducing the amount of east-west through traffic in Fort Valley, improving traffic congestion. Traffic projections indicate approximately 50% of SR 96 traffic would use the new roadway, resulting in a 50% drop in traffic volume on SR 96, in the city of Fort Valley. Of the traffic that would use the new roadway, it is estimated that 16.5% would be comprised of large trucks.

Logical Termini for this project has been determined by the Office of Planning. The northern terminus would be the intersection of SR 49 Connector at SR 49, and the southern terminus would be SR 96, just east of CR 107/Fire Tower Road. As a result, this project would achieve independent utility.

Description of the proposed project:

This project would construct a two-lane roadway on new location, extending the existing SR 49 Connector to SR 96, east of the city of Fort Valley in Peach County. The project would begin on SR 49 Connector approximately 600 feet west of the existing intersection of the SR 49 Connector and SR 49. A two-lane roundabout is proposed for the intersection of SR 49 Connector and SR 49. The project would proceed southeast on new location for approximately 400 feet with a 4 lane, 10-foot raised island rural typical section. This typical section would then transition to a rural two-lane prior to grade separating the crossing of the Norfolk Southern Railroad. This bridge would be approximately 250 feet long and 43.5 feet wide. The rural two-lane typical section would continue throughout the remainder of the project, crossing CR 50/Old Macon Road and CR 70/Fullwood Road at-grade, before merging with existing SR 96, approximately 500 feet west of CR 106/Lane Road. A continuous movement is proposed at the junction with SR 96. The segment of existing SR 96 between the proposed alignment and Fort Valley would be connected to the alignment by way of a new three-legged intersection.

Description of the proposed project continued:

The proposed SR 49 Connector Extension right-of-way would vary between approximately 125 feet and 237 feet. The total length of the project would be approximately 2.8 miles. The design speed would be 55 mph.

Is the project located in a PM 2.5 Non-attainment area? ____Yes __X__No

Is the project located in an Ozone Non-attainment area? ____Yes __X__No

PDP Classification: Major__X___ Minor_____

Full Oversight ( ), Exempt (X), SF ( ), Other ( )

Functional Classification: Rural Minor Arterial

U. S. Route Number(s): TBD **State Route Number(s):** SR 49 Conn, SR 96

Traffic (ADT):

Open Year Traffic		Design Year Traffic	
Year: 2015	ADT: 4350 (16.5 %T)	Year: 2035	ADT: 6150 (16.5 %T)

Existing design features: All but 600 feet of project is on new location

- Typical Section(s):
  - SR 49 Connector: Four 12-foot lanes with a 44-foot raised median tapering to a 20-foot raised median at the intersection with SR 49, rural
  - SR 49: Four 12-foot lanes with a 14-foot flush median, rural
  - SR 96: Two 12-foot lanes, rural
- Design Speed:
  - SR 49 Connector: 55 mph
  - SR 49: 55 mph
  - SR 96: 55 mph
- Minimum Radius of Curve:
  - SR 96: 5729.58 feet
- Maximum Grade:
  - SR 96: 5.0%
- Width of Right-of-Way:
  - SR 49 Connector.: 200 feet
  - SR 49: 120 feet
  - SR 96: 90 feet
- Major Structures: None
- Major Interchanges or Intersections: SR 49 Conn/SR 49 intersection
- Existing Length of Roadway Segment: SR 49 Connector: 0.1 miles

Proposed Design Features

- Proposed Typical Section(s):
  - Four 12-foot lanes with a 20-foot raised median, rural (on SR 49 Connector from beginning of project to the intersection of SR49)
  - Four 12-foot lanes with a 10-foot raised island, rural (from the intersection of SR 49 Connector to 400 feet southeast on new location)
  - Two 12-foot lanes, rural (on new location from 400 feet southeast of the intersection of SR 49 to existing SR 96, and SR 96 tie-in)
- Proposed Pavement Design: (Office of Materials and Research, 6/26/2009)
  - 1.5 inch - 12.5mm Superpave
  - 2.0 inch - 19mm Superpave
  - 3.0 inch - 25.0 mm Superpave
  - 10.0 inch - Graded Aggregate Base
- Proposed Design Speed: 55 mph
- Proposed Maximum Grade Mainline: 2.0% Maximum Grade Allowable: 6.0%
- Proposed Maximum Grade Side Road: 5.0% Maximum Grade Allowable: 9.0%
- Proposed Maximum Grade Driveway: N/A
- Proposed Maximum Radius of Curve: 3000 feet Minimum Radius Allowable: 960 feet
- Proposed Maximum Superelevation Rate: 4.9% Maximum Rate Allowable: 6.0%
- Right-of-Way:
  - Width: Varies: 125 feet – 237 feet.
  - Easements: Temporary ( ), Permanent (X), Utility ( ), Other ( ).
  - Type of Access Control: Full ( ), Partial (X), By permit ( ), Other ( ).
  - Number of Parcels: 16 Number of Displacements:
    - Business: 0
    - Residences: 0
    - Mobile Homes: 0
    - Others: 0
- Structures:
  - Single 4 foot by 5 foot box culvert channeling Ephemeral Stream #1.
  - New bridge over Central of Georgia Railroad Co. Dimensions: approximately 250 feet long, 43.50 feet wide.
- Major Intersections and Interchanges: SR 49 Conn/SR 49 and SR 96
- Transportation Management Plan Anticipated : Yes (X) No ( )
- Design Exceptions to Controlling Criteria Anticipated:

	YES	NO	UNDETERMINED
Horizontal Alignment:	( )	(X)	( )
Lane Width:	( )	(X)	( )
Shoulder Width:	( )	(X)	( )
Vertical Grades:	( )	(X)	( )
Cross Slopes:	( )	(X)	( )
Stopping Sight Distance:	( )	(X)	( )
Superelevation Rates:	( )	(X)	( )
Vertical Alignment:	( )	(X)	( )
Speed Design:	( )	(X)	( )

- Design Exceptions to Controlling Criteria Anticipated continued:

	YES	NO	UNDETERMINED
Bridge Width:	( )	(X)	( )
Bridge Structural Capacity:	( )	(X)	( )
Lateral Offset To Obstruction	( )	(X)	( )

- Design Variances: None at this time.
- Environmental concerns:
  - USACE 404 Individual Permit not required. Ecology impacts are below the threshold to warrant a PAR. One ephemeral stream impacted No stream channel changes proposed.
  - T & E Species: No known T & E Species would be impacted.
  - History: Four eligible historic resources are located along the project corridor. No property from any of these resources is expected to be taken or impacted, and therefore, no significant impacts are currently anticipated. Concurrence for eligible historic resources signed by SHPO on 9/5/2008.
  - Archeology: No eligible Archaeological sites are known at this time.
  - Parks: No parks within project limits.
  - Cemeteries: No known cemeteries within project limits.
  - Underground Storage Tanks: None known at this time.
  - Hazardous Waste Sites: None known at this time.
- Anticipated Level of Environmental Analysis:
  - Are Time Savings Procedures Appropriate? Yes ( ), No (X)
  - Categorical Exclusion Anticipated (CE) ( )
  - Environmental Assessment/Finding of No Significant Impact (FONSI) (X)
  - Environmental Impact Statement (EIS) ( )
- Utility involvements:
  - AT&T
  - Valley Cable TV
  - Flint EMC
  - Municipal Electric Authority of Georgia (MEAG)
  - Ft. Valley Utility Comm. (electric)
  - Ft. Valley Utility Comm. (gas)
  - Ft. Valley Utility Comm. (water & sewer)
  - Central of Georgia Railroad Co.
- VE Study Anticipated Yes (X) No ( )
- Benefit/Cost Ratio 4.00

Project Cost Estimate and Funding Responsibilities:

	PE	ROW	UTILITY	CST	MITIGATION
By Whom	GDOT	GDOT	LOCALS	GDOT	GDOT
$ Amount	$500,000	$4,636,000	$843,240*	$8,953,798**	$0

*Utility cost includes: Reimbursable utility costs ($663,240), and Railroad costs ($180,000).

**Construction cost includes: Engineering and Inspection amount of $355,733 (5%), Total Fuel Adjustment amount of $652,252 (attached), and Total Liquid Asphaltic Concrete Adjustment amount of $845,813 (attached).

Project Activity Responsibilities:

- Design: GA Department of Transportation
- Right-of-Way Acquisition**:** GA Department of Transportation
- Right-of-Way Funding (real property): GA Department of Transportation
- Relocation of Utilities: Local Government - PFA signed 2/3/2010, See attachments
- Letting to Contract: GA Department of Transportation
- Supervision of Construction: GA Department of Transportation
- Providing Material Pits: To be determined
- Providing Detours: No detours anticipated
- Environmental Studies/Documents/Permits: GA Department of Transportation
- Environmental Mitigation: GA Department of Transportation - None anticipated

Coordination:

- Initial Concept Meeting Date and Brief Summary: April 23, 2008. Minutes attached
- FHWA: June 5, 2008 Coordination Meeting. Minutes attached.
- PAR: No Individual Permit required; No PAR required.
- FEMA, USCG, and/or TVA: Not applicable.
- Public Involvement: A PIOH is recommended by OES's environmental staff. A PHOH is required because the project's NEPA document is anticipated to be an EA/FONSI.
- Local Government Comments: Initial Concept Meeting & Concept Meeting minutes attached.
- Other Projects in the Area:

Project Number	PI#	Description
CSNHS-0008-00(837)	0008387	SR 96 Widening east of Ft. Valley
MSL00-0000-00(951)	0000951	CR 49 Bridge Replacement
STP00-0000-00(405)	0000495	SR 7/US 341 Widening
MLP00-0096-00(051)	320960	SR 96 Widening in Ft. Valley

- Railroads: This project proposes to grade separate the existing Central of Georgia Railroad approximately 0.3 miles southeast of the SR 49 Connector intersection with SR 49. The Office of Utilities recommended allocating room for an additional track during the design phase at the April 23, 2008 Initial Concept Meeting.
- Other Coordination to Date: None at this time.

Scheduling – Responsible Parties' Estimate*:

- Time to complete the Environmental process: Begin: TBD End: TBD (24 months)
- Time to complete preliminary Construction Plans: Begin: TBD End: TBD (12 months)
- Time to complete Right-of-Way plans: Begin: TBD End: TBD (4 months)
- Time to complete the Section 404 Permit: None, no 404 permit required.
- Time to complete final Construction Plans: Begin: TBD End: TBD (18 months)
- Time to complete purchase of Right-of-Way: Begin: TBD End: TBD (12 months)
- List other major items that will affect the project schedule: None known at this time.

*Construction and Right-of-Way funding are currently programmed in long range.

Other alternatives considered:

Alternative 1 would begin at SR 49 and the SR 49 Connector with a signalized 4-way intersection. This alignment would proceed on new location in a southeasterly direction as a four-lane, 44-foot wide depressed median, rural typical, bridging over Central of Georgia Railroad Company. The alignment would continue in a southeasterly direction creating a new intersection with CR 50/Old Macon Road. After crossing CR 50/Old Macon Road the alignment would continue in a southeasterly direction for approximately 5200 feet. This alignment would then turn to the south and form a proposed 90 degree intersection with SR 96. This intersection would be approximately 600 feet east of the existing intersection of SR 96 and CR 107/Fire Tower Road. Alternative 1 would also realign CR 122/Buckeye Road to intersect at 90 degrees with SR 96 and form the fourth leg of this proposed intersection. Because of higher property impacts and an adverse impact to a potentially eligible historic resource, further study of Alternative 1 was suspended.

Alternative 2 would begin at SR 49 and the SR 49 Connector with a signalized 4-way intersection. This alignment would proceed on new location in a southeastern direction as a four-lane, 44-foot wide depressed median, rural typical, bridging over Central of Georgia Railroad Company. The alignment would continue in a southeasterly direction creating a new intersection with CR 50/Old Macon Road. After crossing CR 50/Old Macon Road the alignment would continue in a southeasterly direction for approximately 500 feet then turning to the east. This alignment would continue due east paralleling existing property lines for a approximately 3500 feet. This alternate alignment would then turn to the southeast creating a new intersection with CR 70/Fullwood Road. The alignment would then turn to the south and create a proposed 90 degree intersection with SR 96. This proposed intersection would be approximately 1200 feet east of the existing intersection of CR 70/Fullwood Road and SR 96. Location and type of intersection with SR 96 was not the most desirable when compared to proposed alternate.

Alternative 3 would begin at SR 49 and the SR 49 Connector with a signalized 4-way intersection. This alignment would proceed on new location in a southeasterly direction as a four-lane, 44-foot wide depressed median, rural typical, bridging over Central of Georgia Railroad Company. The alignment would then turn to the south creating a new intersection with CR 50/Old Macon Road. After crossing CR 50/Old Macon Road the alignment would continue in a southerly direction for approximately 6000 feet. The alignment would then create a proposed 90 degree intersection with SR 96. This proposed intersection would be approximately 1200 feet west of the existing intersection of CR 107/Firetower Road and SR 96. Further study was suspended because of higher environmental impacts when compared to Alternatives 1 and 2.

Comments:

1. A four-lane, rural typical section was originally proposed for this project. The proposed typical section was revised to a two-lane, rural typical section after projected traffic was received.
2. A signal was originally proposed for the intersection of SR 49 and SR 49 Connector/ SR 49 Connector Extension. A Signal Warrant/Roundabout Analysis done the by District Traffic Engineer recommends that a roundabout be the primary consideration for this intersection.
3. Portions of this project are located inside the city limits of Fort Valley. The Office of Financial Management recommends that a Utilities Agreement be pursued with the City of Fort Valley.

Comments continued:

4. Recommend rerouting this project as SR 96, to assist in removing through freight and military travel out of Fort Valley. Since SR 96 is part of the Strategic Highway Network (STRAHNET), rerouting this project as SR 96 may make this project potentially available for Defense Access Funding.
5. Probable fluctuations in materials costs may affect the recommended pavement design. Therefore, a review of the pavement design is suggested prior to the completion of the design phase.
6. A VE Study is recommended to be requested after concept approval.
7. A Roundabout TE Study will be completed before PFPR in the design stage of this project.

Attachments:

1. Need And Purpose Statement
2. Detailed Cost Estimates:
   a. Construction, including Engineering and Inspection
   b. Fuel & Liquid Asphalt Concrete Price Adjustments
   c. Right-of-Way
   d. Utilities
   e. Railroad Utilities
3. Benefit/Cost Analysis Work Sheet
4. Typical Sections
5. Initial Concept Meeting Minutes
6. FHWA Meeting Minutes
7. Concept Meeting Minutes
8. Traffic Projections
9. Capacity Analysis Summary
10. Signal Warrant/Roundabout Analysis
11. Executive Summary, Central Georgia HPC 6 Corridor Management Plan
12. Project Framework Agreement, Peach County
13. Roundabout Lighting Agreement, City of Fort Valley

Approvals:

Concur: _____
Director of Engineering

Approve: _____ Date: 1/27/11
Chief Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P.I. No. 0006963 **OFFICE** Planning

DATE 2/10/09

FROM Angela T. Alexander, State Transportation Planning Administrator

TO Glenn Bowman, P.E., State Environmental/Location Engineer
Attn.: Tony Jones

SUBJECT Updated Need and Purpose Statement - Peach County
STP-0006-00(963), P.I. 0006963

As requested, Planning has attached an updated Need and Purpose statement reflecting the most recent design traffic provided to Planning for PI# 0006963 SR 49 Connector Extension. The logical termini & existing and projected traffic conditions section has been updated due to the design traffic provided, and the background section has also been updated to reflect the new two-lane concept for the project.

If you have any questions, please contact Kelly Gwin at (404) 631-1808.

ATA/kmg

Attachment

Need and Purpose Statement
SR 49 Connector Extension
CSSTP-0006-00(963) in Peach County
P. I. No.: 0006963
New Roadway Construction

Background

This project was originally identified in the Central Georgia High Priority Corridor 6 (HPC 6) Plan which was completed in 2003. The HPC 6 follows I-16, SR 96, and US 80 in Georgia and continues along US 80 through Alabama to Meridian, Mississippi. The purpose of the plan was to evaluate the central Georgia portion of the HPC 6, the strategic east-west freight corridor, and make recommendations to more expediently connect Georgia's east coast po rts to the west towards Alabama and continuing on to Mississippi.

In February 2004, local government officials in Peach County met with the Commissioner to express a desire for the existing SR 49 Connector Extension to SR 96. Extending the SR 49 Connector to SR 96 would reduce congestion through downtown Ft. Valley and provide continued travel along SR 96. Widening SR 96 through Ft. Valley is not possible due to the impacts. The Planning Office submitted a project recommendation to the Department's Project Nomination Review Committee (PNRC) in April 2004. In September 2004, the PNRC requested the project be added into the Department's Long Range Program.

As identified in the planning process, this project consists of constructing a 2 lane roadway on new location extending the existing SR 49 Connector/Peach Parkway to SR 96 on the east side of Fort Valley in Peach County. Road improvements would begin on SR 49 directly opposite the eastern terminus of the existing SR 49 Connector/Peach Parkway as a 4 lane 20-foot raised median roadway and taper to a 2 lane roadway prior to reaching the Norfolk Southern Railroad. The project would maintain a 2 lane typical section as it bridges the Norfolk Southern Railroad, crossing Old Macon Road and Fullwood Road, and then tying into the existing SR 96. The length of the roadway would be approximately 2.7 miles long. See the location and traffic count station map (Attachment A).

Existing Travel Conditions

All state routes entering and leaving the city of Fort Valley are functionally classified as either rural principal or minor arterials, and they all, except for a small portion of SR 96 between the Crawford county line and SR 96's intersection with the SR 49 Connector, have a speed limit of 55 mph once outside the city limits of Fort Valley. SR 7, 49 and 96 all intersect in the center of Fort Valley.

Logical Termini

For the SR 49 Connector Extension, the south terminus is just east of CR 107/Fire Tower Road. The north terminus is at the intersection of SR 49 and the SR 49 Connector. The termini were selected in order to extend the existing SR 49 Connector to connect to SR 96. It is anticipated that the existing route north of the proposed corridor (SR 49C) will satisfactorily serve current and future traffic needs and not require an additional capacity project, and the existing route south of the proposed corridor (SR 96) is programmed for a widening project in the Department's Long Range Program. (See the 'Projects in the Area' section below)

Existing and Projected Traffic Conditions

Level-of-Service (LOS) is a measure used to describe operational conditions within a traffic stream. There are six identified Levels-of-Service at which a roadway can operate. A letter, "A" through "F", identifies each of the six. Level of Service "A" represents free flow traffic where drivers are virtually unaffected by the presence of other vehicles; whereas, level "F" represents operating conditions in which demand exceeds capacity.

Table 1 below shows the existing LOS according to 2007 traffic count (TC) station data from the Department's Office of Transportation Data and provided to the Office of Planning by the Department's Office of Environment and Location in April 2008. (See the location & traffic count station map – Attachment A) Table 2 below shows the future LOS (2035) based on December 2008 design traffic provided by the Department's Office of Environment and Location:

Table 1: No-Build Traffic Volumes and LOS (Existing – 2007):

Year	TC Station #57	LOS	TC Station #58	LOS	TC Station #238	LOS
2007	11,800	A	15,400	A	6,300	A
Year	TC Station #89	LOS	TC Station #92	LOS		
2007	5,100	C	5,000	C		

Table 2: No-Build Design Traffic and LOS (Future – 2035):

	SR 96/Vineville St (W of intersection w/ SR 7/US 341 in Ft. Valley)		SR 49/Bluebird Blvd (SW of intersection w/ SR 7/US 341 in Ft. Valley)		SR 49/Bluebird Blvd (NE of intersection w/ SR 7/US 341 in Ft. Valley)	
Year		LOS		LOS		LOS
2035	14,300	E	13,100	E	21,500	B
	SR 7/US 341 (N of intersection w/ SR 49 in Ft. Valley)		SR 7/US 341/SR 96 (S of intersection w/ SR 49 in Ft. Valley)		SR 96 (E of intersection w/ SR 7/US 341 in Ft. Valley)	
Year		LOS		LOS		LOS
2035	8,900	E	17,200	E	13,150	E

Projects in the Area

Project Numbers	Description	Programming
CSNHS-0008-00(387), P.I.# 0008387	SR 96 fm CR 107/Fire Tower Road to CR 83/Housers Mill Road- 5.75 mile widening	PE – LR ROW –LR CST - LR

Environmental Justice

There is one Census Tract (CT), CT 402, in which this project is located. The table below shows the demographics for the census tract:

Census Tract	% Minority	$0-25K Per household	$25-50K Per household	$50-75K Per household	$75-100K Per household	$100K+ Per household	1990 Pop.	2000 Pop.
402	60%	45%	28%	14%	6%	6%	3,772	4,296

*Total percentages may be greater or less than 100% due to rounding

Land Use

The existing and future land use is planned to be for agricultural growth in the area of the proposed SR 49 Connector Extension.

Bike and Pedestrian Facilities

In the vicinity of the proposed project, SR 49 is planned for a 4' bike lane in long range, and SR 96 is being signed for bicycle use in the 5 year plan and is planned to have a 4' bike lane in long range as shown in the current Bicycle and Pedestrian Plan for the Middle Georgia Region. The SR 49 4' bike lane is planned from the city of Fort Valley north to the city of Byron in Peach County. The SR 96 signage and 4' bike lane are planned from the Peach/Crawford County line east to the city of Jeffersonville in Twiggs County then continuing south on SR 19 to the city of Allentown in Wilkinson County.

Accident Data

While the rates for the rural principal arterial segment of SR 49 are not above the statewide averages for any of the three years, the accident and injury rates for 2005 and 2006 on the rural minor arterial segment of SR 49 are above the statewide averages. Also, on SR 96, the injury rates for 2005 and the accident & injury rates for 2006 are above the statewide averages. The prominent types of accident on both state routes, besides not a collision with a vehicle, were angle and rear end accidents.

According to the Georgia Department of Transportation's Office of Traffic Operations, the following tables show the accident statistics, in comparison with the statewide average, for the state routes. SR 49 is split up into two segments shown in separate tables on the next page because of the differing roadway functional classifications of the route.

SR 49-Rural Principal Arterial (Begin at SR 49 Connector/End at Moseley Rd)

	2004		2005		2006	
	SR 49	State	SR 49	State	SR 49	State
Accidents	21		10		18	
Accident Rate	261	273	123	253	200	529
Injuries	4		6		10	
Injury Rate	50	149	74	152	111	296
Fatalities	0		0		0	
Fatality Rate	0	3.98	0	0.53	0	6.34

SR 49-Rural Minor Arterial (Begin at Taylors Mill Rd/End at SR 49 Connector)

	2004		2005		2006	
	SR 49	State	SR 49	State	SR 49	State
Accidents	5		18		9	
Accident Rate	201	258	680	186	320	197
Injuries	0		7		7	
Injury Rate	0	142	264	106	249	110
Fatalities	0		0		0	
Fatality Rate	0	2.93	0	2.85	0	2.95

SR 96 (Begin at CR 109-Evans Rd/End at CR 104-Mathews Road

	2004		2005		2006	
	SR 96	State	SR 96	State	SR 96	State
Accidents	9		9		13	
Accident Rate	135	258	143	186	200	197
Injuries	4		11		8	
Injury Rate	60	142	175	106	123	110
Fatalities	0		0		0	
Fatality Rate	0	2.93	0	2.85	0	2.95

Type of Accident Summary

The following table indicates the type of accidents along the identified segments of the subject area for the three years of 2004, 2005, and 2006:

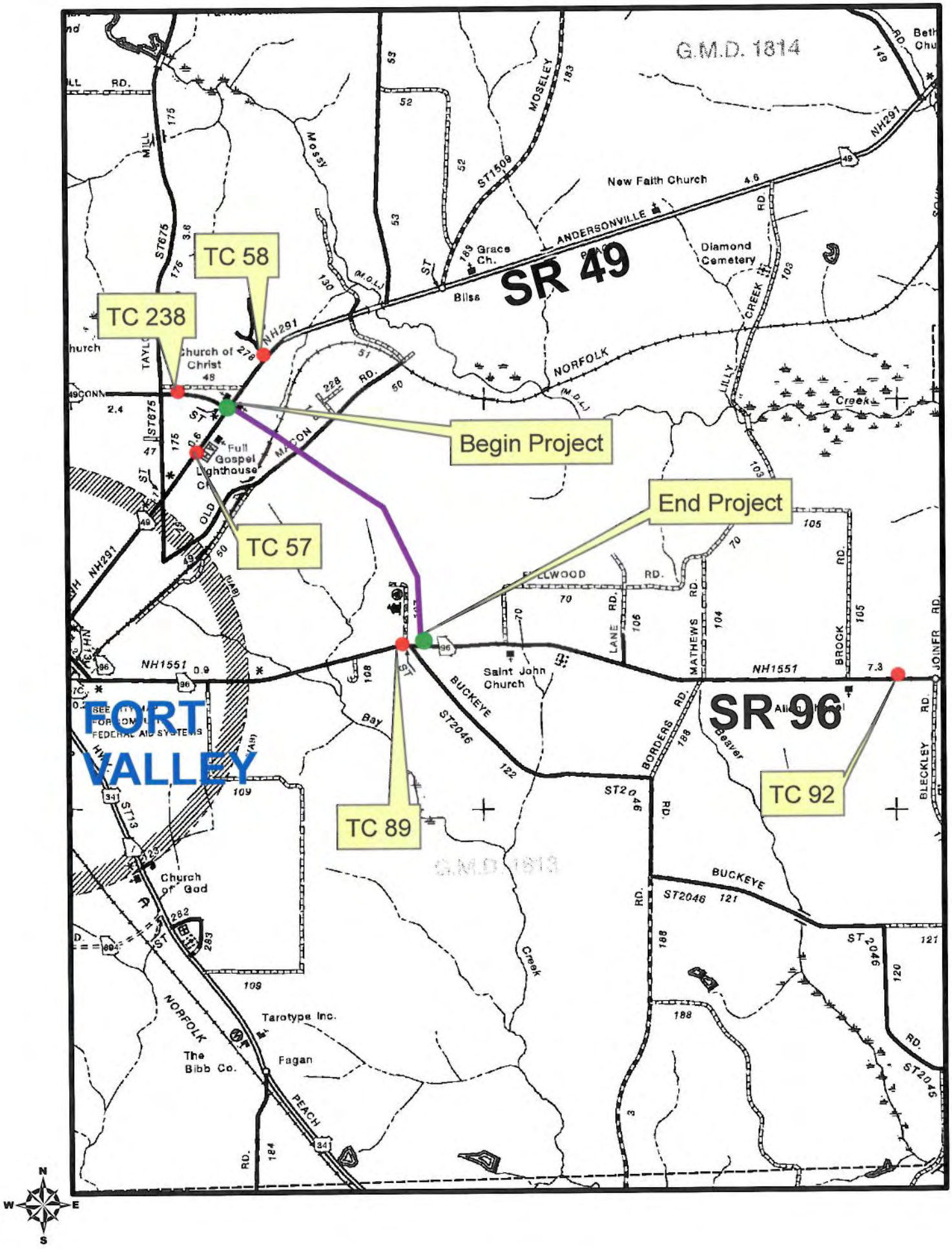
Type of Accident 2004/2005/2006	SR 49	SR 96	Total	Percent	On Roadway	Off Roadway
Rear End	10	5	15	13%	15	0
Angle	20	3	23	20%	20	3
Side Swipe	11	0	11	10%	11	0
Head On	2	1	3	3%	3	0
Not a Collision w/a Vehicle	38	22	60	54%	33	27
Sub-total	81	31	112	100%	82	30

Need and Purpose

The need and purpose of the project is to provide connectivity between the existing SR 49 Connector and SR 96 in turn relieving traffic congestion through downtown Ft. Valley and providing continued travel along SR 96 for motorists and through freight movement.

ATTACHMENT A

SR 49 Connector Extension
PI# 0006963



Construction Cost Estimate DATE : 10/06/2010

P.I. NUMBER: 0006963 SPEC YEAR: 01

DESCRIPTION: SR 49 CONNECTOR EXTENSION - PEACH COUNTY

COST GROUPS FOR JOB 0006963 Peach County

COST GROUP	DESCRIPTION	QUANTITY	PRICE	AMOUNT
ASPH	ASPHALT_12.5MM	6698.000	66.81186	447,505.84
ASPH	ASPHALT_19.0MM	8931.000	65.58824	585,768.57
ASPH	ASPHALT_25.0MM	13,396.000	63.90196	856,030.66
BASE	BASE/AGGREGATE 12 IN	66,168.000	16.02636	1,060,432.19
413-1000	BITUM TACK COAK	26,791.000	2.05000	55,176.60
CURB	CONC. 6 IN HEADER CURB TYPE 7	340.000	13.44169	4,570.17
CURB	CONC. 4 IN HEADER CURB TYPE 9A	415.000	26.00000	10,790.00
CURB	CONC. CURB & GUTTER 30 IN TYPE 2	2,385.000	10.40568	24,817.55
CONC	CONC. 9 IN PLAIN PC PAVEMENT	503.000	124.05679	62,400.57
CONC	CONC. MEDIAN 8 IN	1,904.000	105.45393	200,784.28
CONC	BRIDGE OVER NOR-SOUTH R/R	10,875.000	95.00000	1,033,125.00
ERTHCY	EARTHWORK (CY)	126,400.000	10.82934	1,368,828.58
EROCPCTO	EROSION CONTROL (PERCENT OF JOB)	70,455.215	6.73000	474,163.60
DRNGPCTO	DRAINAGE (PERCENT OF JOB)	70,455.215	2.56000	180,365.35
TRFTPCTO	TRAFFIC CONTROL-TEMPORARY (PCT OF JOB)	70,455.215	3.63000	255,752.43
GENR	GENERAL/FIELD OFFICE/ETC (LS)	1.000	72791.72	72,791.72
LTNGPCTO	LIGHTING (PERCENT OF JOB)	70,455.215	0.57000	40,159.47
LSCPPCTO	LANDSCAPING (PERCENT OF JOB)	70,455.215	0.65000	45,795.89
PVMKPCTO	PAVEMENT MARKING (PERCENT OF JOB)	70,455.215	0.04000	2,818.21
GDRLPCTO	GUARDRAIL/BARRIER (PERCENT OF JOB)	70,455.215	3.10000	218,411.17
SIGNPCTO	SIGNS (PERCENT OF JOB)	70,455.215	0.18000	12,681.94
RMVL	CLEARING & GRUBBING	1.000	69,394.00000	69,394.00
SRTS	STATE ROUTE TRAFFIC STRIPE	4.000	1,539.24171	6,156.97
MISCPCTO	MISCELLANEOUS (PERCENT OF JOB)	70,455.215	0.17000	11,977.39
ACTIVE COST GROUP TOTAL				**7,100,698.15**
ENGINEERING AND INSPECTION (5%)				355,034.91
ESTIMATED COST:				**7,455,733.06**
CONTINGENCY (0%):				00.00
ESTIMATED TOTAL:				**7,455,733.06**

Date 10/14/2010

P.I. Number **6963** County **Peach**

Project Number **CSSTP-0006-00(963) - SR49 CONNECTOR EXTENSION**

Special Provision, Section 109-Measurement and Payment

FUEL PRICE ADJUSTMENT *(ENGLISH 125% MAX)*

ENTER FPL DIESEL	2.933
ENTER FPM DIESEL	6.599

ENTER FPL UNLEADED	2.62
ENTER FPM UNLEADED	5.895

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

INCREASE ADJUSTMENT
125.00%

INCREASE ADJUSTMENT
125.00%

ROADWAY ITEMS	QUANTITY	DIESEL FACTOR	GALLONS DIESEL	UNLEADED FACTOR	GALLONS UNLEADED	REMARKS
Excavations paid as specified by Sections 205 **(CUBIC YARD)**		0.29		0.15		
Excavations paid as specified by Sections 206 **(CUBIC YARD)**	126400.000	0.29	36656.00	0.15	18960.00	
GAB paid as specified by the ton under Section 310 **(TON)**	66168.000	0.29	19188.72	0.24	15880.32	
Hot Mix Asphalt paid as specified by the ton under Sections 400 **(TON)**		2.90		0.71		
Hot Mix Asphalt paid as specified by the ton under Sections 402 **(TON)**	29025.000	2.90	84172.50	0.71	20607.75	
PCC Pavement paid as specified by the square yard under Section 430 **(SY)**	503.000	0.25	125.75	0.20	100.60	

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Bridge Excavation (CY) Section 211	73.00	48.59	3.5471	8.00	28.38	1.50	5.32	
Class __Concrete (CY) Section 500	100.00	551.00	55.1000	8.00	440.80	1.50	82.65	
Class __Concrete (CY) Section 500				8.00		1.50		
Class __Concrete (CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500	168.00	550.00	92.4000	8.00	739.20	1.50	138.60	
Superstru Con Class__(CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Concrete Handrail (LF) Section 500				8.00		1.50		
Concrete Barrier (LF) Section 500	255.00	43.92	11.1996	8.00	89.60	1.50	16.80	

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS

Stru Steel Plan Quantity (LB) Section 501				8.00		1.50		
Stru Steel Plan Quantity (LB) Section 501				8.00		1.50		
PSC Beams_____ (LF) Section 507	634.00	205.00	129.9700	8.00	1039.76	1.50	194.96	
PSC Beams_____ (LF) Section 507				8.00		1.50		
PSC Beams_____ (LF) Section 507				8.00		1.50		
Stru Reinf Plan Quantity(LB) Section 511				8.00		1.50		
Stru Reinf Plan Quantity(LB) Section 511				8.00		1.50		
Bar Reinf Steel (LB) Section 511	72800.00	0.87	63.3360	8.00	506.69	1.50	95.00	
Piling___inch (LF) Section 520	448.00	70.00	31.3600	8.00	250.88	1.50	47.04	
Piling___inch (LF) Section 520				8.00		1.50		
Piling___inch (LF) Section 520				8.00		1.50		
Piling___inch (LF) Section 520				8.00		1.50		
Piling___inch (LF) Section 520				8.00		1.50		
Piling___inch (LF) Section 520				8.00		1.50		
Drilled Caisson,___ (LF) Section 524				8.00		1.50		
Drilled Caisson,___ (LF) Section 524				8.00		1.50		
Drilled Caisson,___ (LF) Section 524				8.00		1.50		
Pile Encasement,___(LF) Section 547				8.00		1.50		
Pile Encasement,___(LF) Section 547				8.00		1.50		

SUM QF DIESEL=	**143238.27**	**SUM QF UNLEADED=**	**56129.04**

DIESEL PRICE ADJUSTMENT($)	**$483,135.53**
UNLEADED PRICE ADJUSTMENT($)	**$169,116.79**

ASPHALT CEMENT PRICE ADJUSTMENT
(BITUMINOUS TACK COAT 125% MAX)

APPLICABLE TO CONTRACTS/PROJECTS CONTAINING THE 413 SPECIFICATION, SECTION 413.5.01 ADJUSTMENTS
ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

ENTER APL 450 **ENTER APM** 1012.5

125.00%	INCREASE ADJUSTMENT

L.I.N.	TYPE	TACK (GALLONS)	TACK (TONS)	REMARKS
		26791	115.0700	

TMT = 115.0700

PRICE ADJUSTMENT($)	$62,137.81

400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX

ENTER APL 450 **ENTER APM** 1012.5

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

125.00%	INCREASE ADJUSTMENT

L.I.N. / Spec Number	MIX TYPE	HMA	JMF AC%	AC	REMARKS
0001	12.5 mm SP	6698	5.00	334.90	
0002	19 mm SP	8931	5.00	446.55	
0003	25 mm SP	13396	5.00	669.80	
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			TMT =	1451.25	

PRICE ADJUSTMENT($)	$783,675.00

ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)

APPLICABLE TO CONTRACTS CONTAINING THE 413 SPEC. SECTION 413.5.01 ADJUSTMENTS ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

ENTER APL 450 ENTER APM 1012.5

125.00%	INCREASE ADJUSTMENT

Use this side for Asphalt Emulsion Only

L.I.N.	TYPE	ASPHALT EMULSION (GALLONS)
TMT =		
REMARKS:		

Use this side for Asphalt Cement Only

L.I.N.	TYPE	TACK (GALLONS)
TMT =		
REMARKS:		

MONTHLY PRICE ADJUSTMENT($)	

ADJUSTMENT SUMMARY

FUEL PRICE ADJUSTMENT *(ENGLISH 125% MAX)*

DIESEL PRICE ADJUSTMENT($)	$483,135.53
UNLEADED PRICE ADJUSTMENT($)	$169,116.79
ASPHALT CEMENT PRICE ADJUSTMENT (BITUMINOUS TACK COAT 125% MAX)	$62,137.81
400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX	$783,675.00
ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)	

REMARKS:	

TOTAL ADJUSTMENTS	$1,498,065.13

DWM 10/08

Department of Transportation

State of Georgia

Interdepartmental Correspondence

FILE	R/W Cost Estimate	**OFFICE**	Atlanta
		DATE	October 7, 2010
FROM	Phil Copeland, Right of Way Administrator LaShone Alexander, Right of Way Cost Estimator		
TO	Toney Jones, Location Engineer II		

SUBJECT **Preliminary Right of Way Cost Estimate**
Project: Peach County
P.I. No.: 000693
Description: New Location Project From SR 49/Macon Rd to SR 96/Miami Valley Rd

As per your request, attached is a copy of the approved Preliminary Right of Way Cost Estimates on the above referenced projects.

If you have any questions, please contact LaShone Alexander at One Georgia Center 600 West Parkway Street, NW Atlanta, GA 30308, Right of Way Office at (478) 553-1569 or (478) 232-4045.

`

PC:LA
Attachments
c: File

Preliminary Right of Way Cost Estimate

Phil Copeland
Right of Way Administrator
By: LaShone Alexander

Date: October 7, 2010
Project: PESTP-0006-00(963)Peach
Existing/Required R/W: Varies/Varies
Project Termini : From SR 49/Macon Rd. to SR 96/Miami Valley Rd.
Project Description: New Location Project

P.I. Number: 0006963
No. Parcels: 9

Land:	Commercial R/W: 5.4 acres @ $ 150,000/acre	$ 810,000	
	Ag/Res: 19.9 acres @ $ 10,000/acre	199,000	
	Pecan Orchard: 11.6 acres @ $ 50,000/acre	580,000	$ 1,589,000
Improvements :	misc. site improvements		150,000
Relocation:	Commercial (0)		
	Residential (0)		0.00
Damage :	Proximity (2)	$ 75,000	
	Consequential (0)		
	Cost to Cure (2)	55,000	130,000
	Net Cost		$ 1,869,,000

Net Cost		$ 1,869,000
Scheduling Contingency	55 %	1,027,950
Adm/Court Cost	60 %	1,738,170
		$ 4,635,120

Total Cost $4,636,000

Note: The Market Appreciation (40%) is not included in the updated Preliminary Cost Estimate.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE **STP-0006-00(963), Peach County, P.I. # 0006963**
SR-49 Bypass from SR-49 Conn to SR-96

OFFICE Thomaston

DATE September 23, 2010

FROM Kerry Gore, District Utilities Engineer

TO Tony Jones, Location Engineer II, Office of Design Policy and Support

SUBJECT **PRELIMINARY UTILITY COST (ESTIMATE)**

As requested by your office, we are furnishing you with a Preliminary Utility Cost estimate for each utility with facilities potentially located within the project limits.

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE
BellSouth d/b/a AT&T GA	104,500	0
Valley Cable TV	22,000	0
Flint EMC	11,000	137,000
MEAG	0	352,000
Ft. Valley Utility Comm (electric)	0	11,000
Ft. Valley Utility Comm (gas)	0	22,000
Ft. Valley Utility Comm (water & sewer)	0	141,240
TOTALS	**$137,500**	**$663,240**

Total Preliminary Utility Cost Estimate **$800,740**.

If you have any questions, please contact Harland Smith at 706-646-6696.

KG/pls

cc: Jeff Baker, P.E., State Utilities Engineer *(via: e-mail)*
Angela Robinson, Office of Financial Management *(via: e-mail)*
Brink Stokes, Area Engineer *(via: e-mail)*

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE CSSTP-0006-00(963), Peach County
PI No.: 0006963

OFFICE: State Utilities Office

FROM Jeff Baker, State Utilities Engineer

DATE: October 14, 2010

TO Glenn Bowman – State Environmental/Location Engineer
ATTN: Tony Jones

SUBJECT PRELIMINARY RAILROAD COST FOR SURFACE WORK (CONCEPT ESTIMATE)

A review of railroads located within the project limits on the above referenced project has been conducted based on the proposed concept report provided. Listed below is a breakdown of the estimated railroad costs:

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE
Central of Georgia Railroad Co.	$0.00	$140,000.00
Preliminary Engineering	$0.00	$40,000.00
Total Reimbursement Cost:	**$0.00**	**$180,000.00**

Total railroad surface work reimbursable cost for the above project is estimated to be:
$180,000.00.

Please note that this amount does not include other reimbursable utility costs that may be associated with this project. Please keep the railroad costs separate from other utilities in your designer's cost estimate.

If you have any questions, please contact Richard Crowley, (404)631-1372, rcrowley@dot.ga.gov or Loren Bartlett, (404) 631-1370, lbartlett@dot.ga.gov.

JB:RLC:lfb

cc: Lee Upkins, State Utilities Preconstruction Engineer
Angela Robinson, State Financial Management Administrator
Kerry Gore, District 3 Utilities Engineer
Choose an item.

Benefit Cost Analysis Work Sheet
CONGESTION Projects

PI NUMBER: 0006963

PROJECT NUMBER: CSSTP000600963

COUNTY:PEACH

PROJECT DESCRIPTION: SR 49 CONNECTOR EXTENSION

Congestion Benefit = Tb + CMb + Fb

Person Time Savings Benefit (Tb)

T_b = D_b{hrs/veh)} * (.5*ADT {veh/day}) * 250 {days/yr}* 20 {yrs} * 15.47 {$/hr}

*Db (hrs)	0.0935
ADT	6,150.00
Tb ($s)	$22,239,091.88

Average Cost of Time = $15.47 per hour (Obtained from the 2009 Urban Mobility Report)

Commercial or Truck Time Savings Benefit (CMb)

CM_b = D_b {hrs/veh)} * (% truck traffic) * (.5*ADT {veh/day}) * 250 {days/yr}* 20 {yrs} * 102.12 {$/hr}

Db (hrs)	0.0935
Truck Traffic	0.165
ADT	6,150.00
CMb	$24,222,640.61

Commercial Vehicle Operating Cost = $102.12 per hour (Obtained from the 2009 Urban Mobility Report)

Fuel Savings Benefit (Fb)

Fb= {Db[hrs/veh]*(.5*ADT) [veh/day]*TS[miles/hr]*FC[$/gal]*250 [days/yr]*20 [yrs]} / FE[miles/gal]

ADT	6,150.00
Fb ($s)	$7,864,386.25

Fuel Cost = $2.46per gallon (Obtained from AAA)

Fuel Effeciency(FE) = 17.2miles/per gallon (Obtained from US DOT: Bureau of Transportation Statistics)

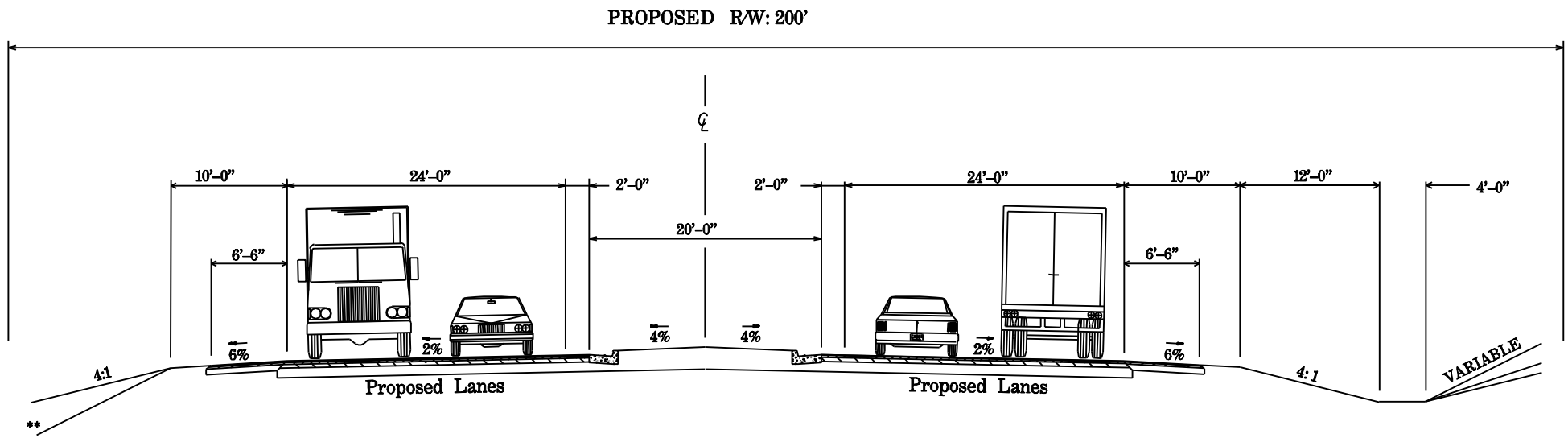
Total Congestion Benefit	**$54,326,118.73**
Total Project Cost	**$13,572,473.00**
B/C Ratio	**4.00**

The 2009 Urban Mobility Report was prepared by the Texas Transportation Institute.

*Reduction in delay or **Delay Benefit (D_b)** can be defined as the difference between the peak hour travel time through the corridor without the proposed improvement and the peak hour travel time through the corridor with the proposed improvement.

Cost	
PE(assumed @10% of Con.) ($s)	$500,000
Asphalt Construction	$7,455,733
Right of Way	$4,636,000
Utilities	$980,740
Total Cost of Project	$13,572,473

MAIN LINE TYPICAL SECTION
20–FOOT RAISED MEDIAN, RURAL
55 MPH SPEED DESIGN



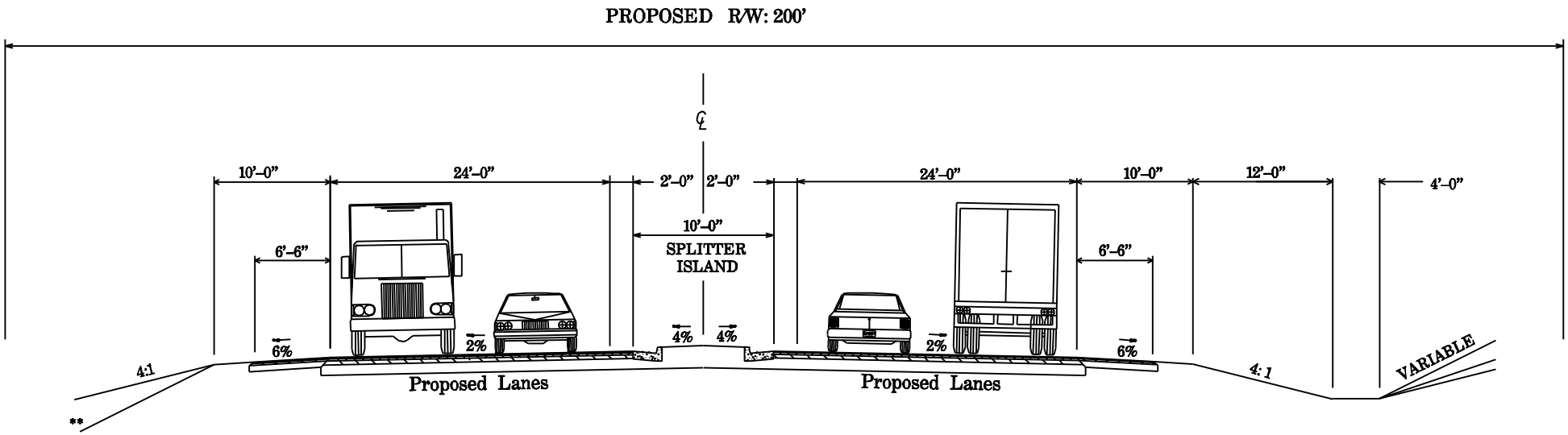
** Guardrail Required when steeper than 4:1
15'–6" shoulder with guardrail

SR 49 CONNECTOR EXTENSION
PI#: 0006963
CSSTP–0006–00(963) PEACH CO.

SR 49 CONNECTOR
FROM BEGINNING OF PROJECT (600 FEET WEST OF SR 49) TO ROUNDABOUT

NOT TO SCALE

MAIN LINE TYPICAL SECTION
10–FOOT RAISED SPLITTER ISLAND, RURAL
55 MPH SPEED DESIGN



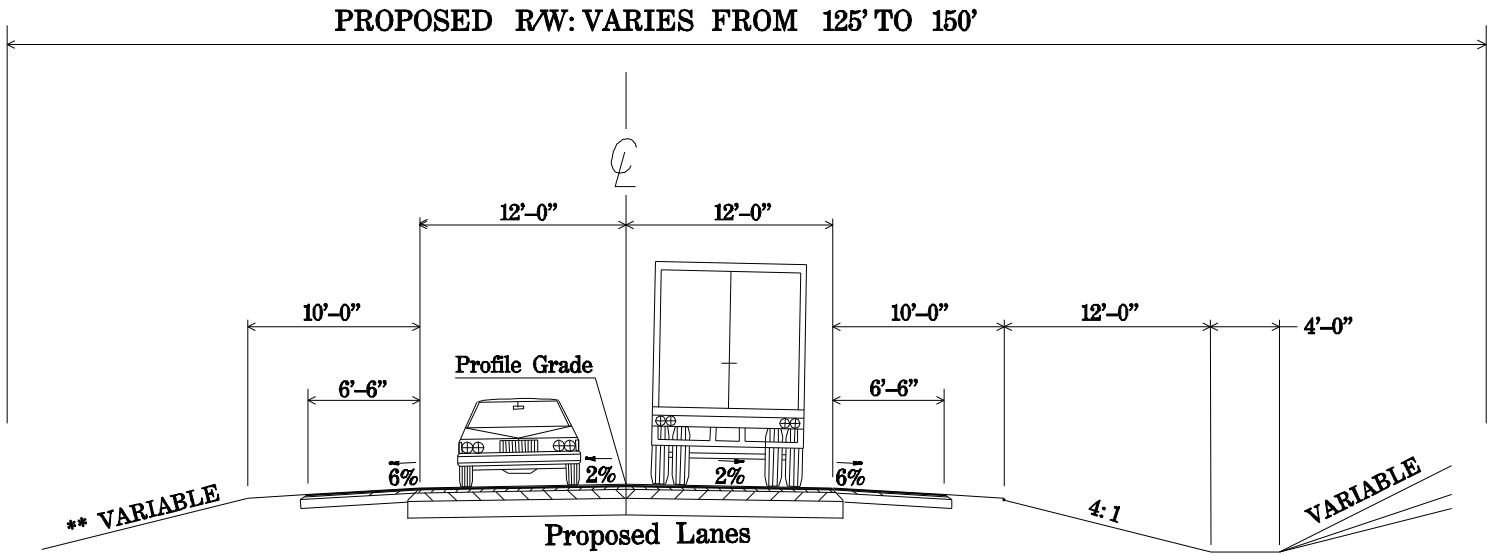
** Guardrail Required when steeper than 4:1
15'–6" shoulder with guardrail

SR 49 CONNECTOR EXTENSION
PI#: 0006963
CSSTP–0006–00(963) PEACH CO.

SR 49 NEW LOCATION
(FROM ROUNDABOUT TO JUST WEST OF NORFOLK SOUTHERN RAILROAD)

NOT TO SCALE

MAIN LINE TYPICAL SECTION
2 LANE RURAL
55 MPH SPEED DESIGN



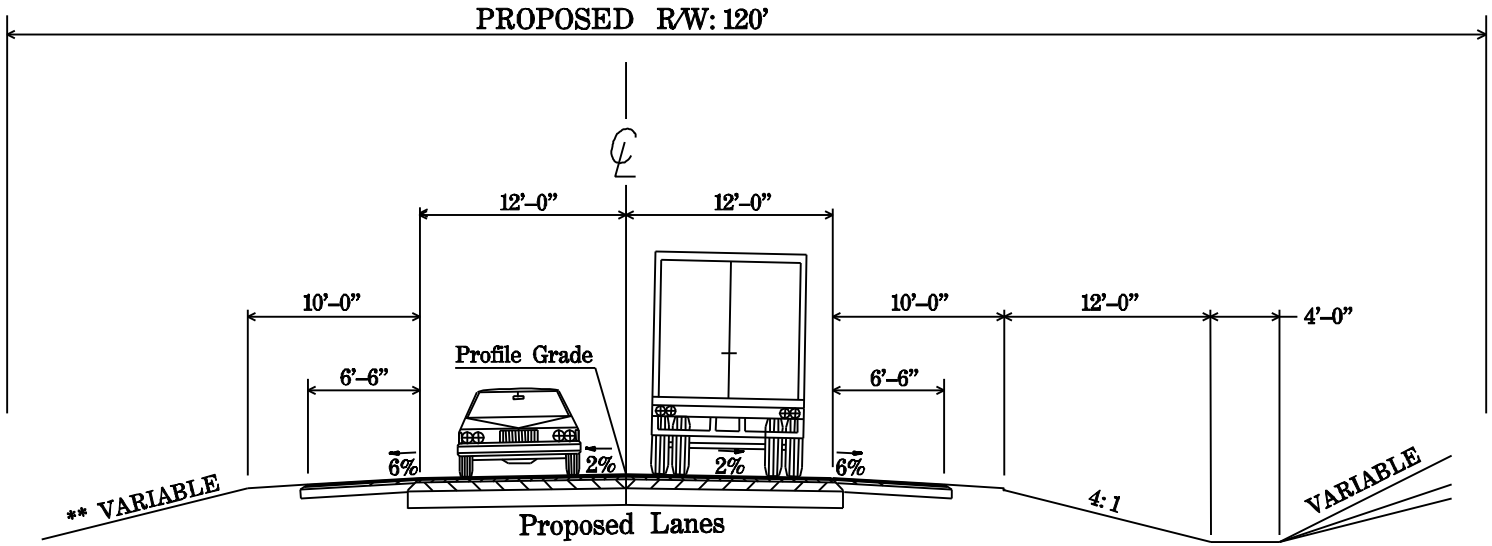
** Guardrail Required when steeper than 4:1
15'–6" shoulder with guardrail

SR 49 CONNECTOR EXTENSION
PI#: 0006963
CSSTP–0006–00(963) PEACH CO.

FROM JUST WEST OF NORFOLK SOUTHERN RAILROAD
TO SR 96, JUST WEST OF CR 106/LANE RD.

NOT TO SCALE

TIE–IN TYPICAL SECTION
2 LANE RURAL
55 MPH SPEED DESIGN



** Guardrail Required when steeper than 4:1
15'–6" shoulder with guardrail

SR 49 CONNECTOR EXTENSION
PI#: 0006963
CSSTP–0006–00(963) PEACH CO.

CONNECTS SR 96 TO THE SR 49 CONNECTOR EXTENSION, EAST OF FORT VALLEY.

NOT TO SCALE

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE

FILE STP-0006-00(963)
Peach County
P.I. No. 0006963

OFFICE Environment/Location

DATE May 6, 2008

GB/DCP

FROM Glenn Bowman, P.E., State Environmental/Location Engineer

TO Distribution Below

SUBJECT: **Initial Concept Meeting Minutes – SR 49 Connector Extension**

Date/Time: Wednesday, April 23, 2008, 10:00 a.m.
Place: City Hall Chambers, City of Fort Valley
Attending:

City of Fort Valley: The Honorable Dr. John E. Stumbo (Mayor); Richard Powell, (Public Works); Larry Dailey, Ned Watson & Keith Spillers (Utilities Commission)
Mid Georgia Regional Development Commission: Bob Rychel
Flint EMC: Harold Watson
GDOT-Thomaston District Office: Thomas Howell (District Engineer); David Millen (Preconstruction Engineer); Tom Queen (Planning); Glenn Williams (Utilities); Cheryl Griffin (Preconstruction); Michael Presley (Traffic); Colandra Barron (Planning); Keven Mack (Trainee)
GDOT-Perry Area Office: Brink Stokes
GDOT-Planning: Kelly Gwinn
GDOT-Utilities: Michael Lankford
GDOT-Environment/Location: Dave Peters (Concept Design/Traffic); Keith Posey (Concept Design); Mike Brown (Concept Design); Tony Jones (Concept Design); Lamu Chanthavong (Concept Design); Funmi Adesesan (NEPA)

Keith Posey opened the meeting by welcoming all attendees and outlining the purpose of the meeting. He explained the meeting agenda and asked all attendees to introduce themselves. After the introductions were made, Keith introduced Mike Brown as the engineer developing the concept and asked Mike to give a description of the project.

Mike then described the project as he referred to display layouts. The project is proposed to be an eastward extension of the existing SR 49 Connector/Peach Parkway from SR 49/Macon Road. It would extend from that point onto new location, would grade separate the Norfolk Southern Railroad, then cross CR 50/Old Macon Road at grade and end at SR 96/Miami Valley Road. The project is estimated to be between approximately 1.6 and 2.6 miles in length. A rural typical section with four 12 foot lanes and a 44 foot grassed median on 250 feet of right-of-way is being proposed. The project is also proposed to have a speed design of 55 mph, with partial control of access.

Keith then opened the floor to the different representatives for questions and comments.

COMMENTS BY EACH OFFICE:

City of Fort Valley

Ned Watson: A force main sewer line along Fort Valley Power Company easement, north of SR 96, is up for bids. I recommend that your alignment match the existing grade and avoid transmission line supports when crossing the easement.

Fort Valley Utilities Commission

Richard Powell: The force main sewer project set to start sometime in July along the north side of the power line. Have you contacted property owners (in the area of the alignment)?
Response - Keith Posey: There was some cursory contact with some of the property owners during the field visit to the corridor site by OEL Engineers. Because very little concept work has been done at this point, property owners typically are not contacted.

Thomaston District Office

Thomas Howell: What is the Need & Purpose of the SR 49 Connector Extension? Are there any plans to include the proposed SR 96 widening project as part of the SR 49 Connector Extension project?
Response - Kelly Gwin: An existing corridor study of SR 96 included the project boundaries and how the projects are related.
Response - Dave Peters: I believe the SR 96 widening project is currently in long range.

Thomas Howell: Shouldn't this project should be designed for continuous movement? The bulk of traffic traveling westbound from I-75 would most likely bypass Fort Valley. Were that to be the case, the existing SR 96 should be re-signed to SR 96 Business, and the bypass be signed as SR 96.
Response - Dave Peters: We consider continuous movement from SR 96 onto new location to be a viable option and plan to evaluate it thoroughly.
Thomas Howell: Have you contacted the property owners that would be impacted by this project?
Response - Keith Posey: We do not typically contact property owners at this point. When OEL's Location Engineers conducted a field investigation of this project, there was some cursory contact with some property owners. We typically invite the general public, which includes property owners, to review the concept and give input at our public involvement meetings.

David Millen: I think data should be collected on the traffic patterns along US 341, and that you look at the possibility of the need to connect SR 96 to US 341/University Boulevard, when considering logical termini for our project.
Response - Kelly Gwin: Extending the current project to US 341 could worsen capacity and cause problems with the need and purpose
David Millen: The grade separation over the Norfolk Southern Railroad should be designed to allow space for an additional track in the future.
Response - Keith Posey: At the currently proposed location of the grade separation there are two sets of parallel tracks.

Tom Queen: There is local interest in extending CR 309/Russell Parkway from CR 83/Housers Mill Road to CR 178/Lakeview Road.

District Utilities

Glenn Williams: Could you (GDOT) match the proposed alignment to the existing grade as closely as possible where it crosses the Railroad? Could you (GDOT) look into closing the RR Crossing on CR 50/Old Macon Road just north of the project? I believe that Federal funding to construct a RR crossing just south of your proposed grade separation could be diverted to your (SR 49 Connector Extension) project.

Environmental/NEPA

Funmi Adesesan: Since the project would all be on new location, an Environmental Assessment (EA) would be required by FHWA.

Flint EMC

Harold Watson: I'd like a copy of the layouts showing the proposed maximum right-of-way limits.

Response - Keith Posey: The right-of-way shown on the layout is a proposed concept right-of-way to begin conceptual studies. Actual right-of-way will not be determined until the project is designed. If you want a copy for estimating utility costs, we will provide one with any concept cost estimate request.

City of Fort Valley, Mayors Office

Fort Valley Mayor, The Honorable Dr. John E. Stumbo: Mayor Stumbo came into the City Hall Chambers just after the meeting adjourned. Introductions were made and Keith Posey gave Mayor Stumbo an overview of the project. Mayor Stumbo then reiterated the comments made during the meeting by Richard Powell, concerning plans for laying a force sewer main along the Fort Valley Power Company easement. This easement parallels SR 96 to the North. He further commented on the city's plans to annex the SR 96 corridor from Fort Valley, east to I-75. He was concerned about the heavy volume of truck traffic in the city and mentioned accidents occurring frequently at certain intersections. The Mayor said that considerable development was expected along SR 96 between Fort Valley and I-75 and that some property owners were subdividing their land in anticipation of this development. He felt that these property owners should be invited to attend our next meeting. Mayor Stumbo also mentioned that the SR 96 corridor is used by Fort Benning as a major deployment route, generating a heavy volume of truck traffic in the early morning hours, and recalled some highway defense funds having been used previously for highway improvements between Fort Valley and Fort Benning.

GB/MHB

Distribution: Todd Long, P.E., Director of Preconstruction
Brent Story, P.E., Transportation Engineer Administrator
Phil Copeland, State Right of Way Administrator
Keith Golden, P.E., State Traffic Safety and Design Engineer
Paul V. Liles, P.E., State Bridge Design Engineer
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David Crim, State Maintenance Engineer
Georgene Geary, P.E., State Materials and Research Engineer
Angela T. Alexander, State Transportation Planning Engineer
Jeff Baker, State Utilities Engineer
Brian Summers, Project Review Engineer
Thomas B. Howell, P.E., District Engineer, Thomaston
Cheryl Griffin, Preconstruction, Thomaston
Katy Allen, P.E., Federal Highway Administration

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE

FILE STP-0006-00(963)
Peach County
P.I. No. 0006963

OFFICE Environment/Location

DATE June 23, 2008

SUBJECT: FHWA Meeting Notes: SR 49 Connector Extension

Date/Time: Thursday, June 05, 2008, 9:45 a.m.
Place: Small Conference Room, O.E.L.
Attending:

FHWA: Michele Lindberg
GDOT-Environment/Location: Dave Peters (Concept Design/Traffic); Mike Brown & Tony Jones (Concept Design); Funmi Adesesan (NEPA)

Project Description:
This project is proposed to be an eastward extension of the existing SR 49 Connector/Peach Parkway from SR 49/Macon Road. It would extend from that point onto new location, would grade separate the Norfolk Southern Railroad, then cross CR 50/Old Macon Road at grade and end at SR 96/Miami Valley Road. The project is estimated to be between approximately 2.6 miles in length. A rural typical section with four 12 foot lanes and a 44 foot grassed median on 250 feet of right-of-way is being proposed. The proposed speed design of the project is 55 mph, with partial control of access. Areas of concern are detailed below. **NOTE**: Final inspection of the SR 49 Connector widening project: FLF-540(30)01 was on May 5th, 2006.

Current Need and Purpose:
The need and purpose of the project is to provide connectivity between existing the SR 49 Connector and SR 96 in turn relieving traffic congestion through downtown Fort Valley and providing continued travel along SR 96 for motorists and through freight movement.

Ms. Lindberg asked for clarification of the need and purpose statement, particularly as it related to the proposed widening of a portion of SR 96 between I-75 and Fort Valley and potential history impacts. All attendees agreed that while the existing SR 49 Connector successfully re-routed traffic on the west side of town (Fort Valley), from Byron/Macon to SR 96 and vice versa, it did not address traffic on the East side of town. *Supporting documentation can be found in the* ***Fall Line Freeway Facts Sheet.***

Presently, northbound traffic on I-75, transitioning to westbound travel on SR 96, must go through Fort Valley by way of either SR 96 or US 341. To bypass Fort Valley they must continue north on I-75 to the Byron exit, turn Southwest onto SR 49, then west onto the SR 49 Connector which terminates at SR 96 some three miles west of Fort Valley. A large volume of truck traffic elects to go through Fort Valley rather than drive the extra distance to the northern bypass. This causes considerable traffic congestion in Fort Valley. Several tight turns and a steep bridge over the Norfolk Southern Railroad further impede traffic flow, particularly for large vehicles.
Extending the SR 49 Connector, would allow traffic from the east side to bypass Fort Valley, thereby relieving traffic congestion in town.

Continuous movement:
Designing for continuous movement was appears to be the most desirable option. Traffic data indicated that the bulk of traffic traveling west along SR 96 from I-75 would most likely bypass Fort Valley. That being the case, a portion of the existing SR 96 could be designated SR 96 Business and the bypass be signed as SR 96.

History:
The Proposed Concept Layout, displayed during the Initial Concept Meeting in Fort Valley, showed two proposed alignments. They were labeled ROUTE 1 & ROUTE 2, ROUTE 2 being the closest to Fort Valley. Long range plans to widen SR 96 from I-75 to the east-most termination of this project would need to be considered when choosing the SR 96 terminus due to several potentially historic properties. Ms. Lindberg felt that choosing ROUTE 2 would "point a loaded gun" at those properties. ROUTE 1 however, would allow for the widening of SR 96 from I-75 to the SR 49 Connector Extension without impacting any potentially historic properties. It was deemed to be the "best fit" alignment primarily for this reason,

Actions Items:
Ms. Lindberg plans to visit Fort Valley in the near future to evaluate traffic conditions personally.
Location will provide her with:

- Layouts detailing the preferred proposed alignment and the town of Fort Valley.
- Traffic data including link volumes and turning movements.
- Refined Need and Purpose statement with focus on relieving traffic congestion in Fort Valley.

NOTE:
During the April 23rd, 2008 Initial Concept Meeting in Fort Valley, Mayor Stumbo said that considerable development was planned along SR 96 between Fort Valley and I-75 and that plans for the construction of a force sewer main had already been completed. He noted that some property owners along SR 96 were subdividing their land in anticipation of this development. Mayor Stumbo also mentioned that the SR 96 corridor is used by Fort Benning as a major deployment route, generating a heavy volume of truck traffic in the early morning hours. He recalled some highway defense funds having been used previously for highway improvements between Fort Valley and Fort Benning. Ms. Lindberg was made aware of the Mayor's comments.

MHB

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. No. 0006963, Peach County
CSSTP-0006-00(963)

OFFICE Environment/Location

DATE June 24, 2009

FROM Glenn Bowman, P.E., State Environmental/Location Engineer

TO Distribution Below

SUBJECT: **Concept Meeting Minutes – SR 49 Connector Extension**

Date/Time: Thursday, June 11, 2009, 10:00 a.m.
Place: District 3 Office, Thomaston
Attending:

Peach County Administrator: Marcia Johnson
Peach County Public Works Director: Billie Segars
Mid Georgia Regional Development Commission: Bob Rychel
MEAG Power: Ben Boucher and Carmelina Telli
FHWA: Katy Allen and Chetna Dixon
GDOT-Thomaston District Office: Thomas Howell (District Engineer); Carol Perry (Right-of-Way)
GDOT-Construction: Richard Marshall
GDOT-Environment/Location: Dave Peters (Concept Design/Traffic); Keith Posey (Concept Design); Mike Brown (Concept Design); Tony Jones (Concept Design); Gabrielle Williams (Concept Design); Funmi Adesesan (NEPA)

Tony Jones opened the meeting by welcoming all attendees and outlining the purpose of the meeting. He explained the meeting agenda and asked all attendees to introduce themselves. After the introductions were made, Tony introduced Mike Brown as the project engineer developing the concept and asked Mike to give a description of the project.

Mike then described the project as he referred to display layouts. The project is proposed to be an eastward extension of the existing SR 49 Connector/Peach Parkway from SR 49/Macon Road to SR 96/Miami Valley Drive. From SR 49 the project it would extend onto new location as a rural typical section with four 12-foot lanes and a 20 foot raised median. It would then taper to a rural typical section with two 12-foot lanes before reaching the grade separation of the Norfolk Southern Railroad. This two lane typical section would be maintained for the duration of the project, crossing CR 50/Old Macon Road and CR 70/Fullwood Road at grade and finally merging with SR 96/Miami Valley Road. The alignment, as proposed, is approximately 2.8 miles in length. The right-of-way, as proposed varies between 125 and 200 feet. The proposed speed design is 55 mph, with partial control of access.
Mike then opened the floor for questions and comments concerning the project description.

Comments regarding the project description:

Billie Segars (Peach County Public Works): Why does the alignment go through all those pecan trees, rather than taking the shorter route through that peach orchard just west of Fullwood Road?
Response – Mike Brown: We considered that early on, but the peach orchard is an eligible historic site.
Billie Segars: If your proposed alignment is built, would it be signed as SR 96, and would existing SR 96 be then designated SR 96 Business?
Response – Mike Brown: That decision is not part of concept development, but Mr. Howell brought it up during the Initial Concept Meeting. He suggested that our alignment provide for continuous movement from SR 96 onto the proposed extension and that, when our project was completed, that the entire SR 49 Connector may be designated as SR 96. Our traffic data shows 16.5 % of the traffic would be trucks, so we chose to design for continuous movement.

Richard Marshall (GDOT Construction): Are there any plans to continue this corridor to SR 7?
Response – Keith Posey: The Need & Purpose of this project does not address SR 7. It's really to relieve the traffic congestion in Fort Valley and route through freight movement away from town. The existing grade separation on existing SR 96 over the railroad is steep, and some trucks have difficulty getting over it. There is also the convergence of three state routes in town SR 7, 49 and 96 and the added traffic generated by the Bluebird and Wonderlodge facilities just north of where the three state routes converge.
Richard Marshall: There is a county road that comes through town near the college and ties into SR 7, so there's a connection. If you planned to extend on to SR 7, it should be given consideration.
Response – Marcia Johnson: We prefer to build somewhat out of town. We feel it would be safer.
Billie Segars: How about a straight shot south to SR 7?
Response – Mike Brown: With long-range plans to widen SR 96 from I-75 to the SR 49 Connector, we would have issues with the history along SR 96 from Fullwood Road to west of Firetower Road. Widening in that section would require a number of displacements on the side of SR 96 opposite the eligible history. Our current alignment avoids these issues.

Thomas Howell (District 3): Why are we building two lanes instead of four? It doesn't make sense to narrow down to two lanes in this area when most of SR 96 is four lanes on both sides of this project and the rest is planned for widening. Have we looked at taking this all the way to I-75?
Response – Dave Peters: If we extended this project all the way to I-75, it would substantially lengthen the process. It might even require an EIS document.
Response – Thomas Howell: Two lanes just doesn't seem logical. This is the route the Army is going to take to get to the coast.
Response – Keith Posey: Our traffic data doesn't support four lanes.

Thomas Howell (District 3): I think you should take another look at your traffic projections. When we four lane the whole thing to I-75 we will have a lot more traffic.
Billie Segars (Peach County Public Works): Two lanes would cause a bottleneck in the traffic.
Thomas Howell: That's something to think about.
Billie Segars: Maybe we could at least go ahead and get the right of way.
Thomas Howell: I think we should at least buy the right-of-way. If we don't, we're just going to have to come back and buy it later.
Dave Peters (GDOT OEL): This project would still work even if the proposed SR 96 widening is not done. Expanding it to I-75 would bring in issues that would hold up the project. Federal highway is here. Maybe we can get some input from them.

Katy Allen (FHWA): We need to think hard about logical termini. Extending this project to I-75 would expand the environmental document. It may even go to an EIS. We have a bear crossing further down 96 that would be an issue. We are not even sure about logical termini. This project, as is, has logical termini, meets the need and purpose and has independent utility. We are on safer ground if we leave it as is.
What is the schedule for widening SR 96 to the west of I-75?
Response – Thomas Howell: Currently in long range.

Billie Segars (Peach County Public Works): What's the timeframe for design completion on this project?
Response – Dave Peters: If everything goes smoothly, design could be completed in approximately two years.

Thomas Howell (District 3): Terrific project.
Billie Segars (Peach County Public Works): Very much needed project to help with the traffic.

Katy Allen (FHWA): Mike, could you go over the other alignments you considered and tell us how you came to this alignment? What were the environmental issues?
Response – Mike Brown: Initially, we looked at eight alignments, which all began at the intersection of SR 49 and the SR 49 Connector and intersected SR 96 at various points between Lane Road and just west of Firetower Road. Six of these alignments crossed properties which we later determined to be potentially historic. All six of these alignments were ruled out when SHPO deemed those properties eligible. Our decision to design for continuous movement forced a shift in the western most alignment which would impact property within the history boundary, so it was eliminated.
The remaining alignment, which terminated just east of Fullwood Road, was pushed slightly eastward and shifted to merge with SR 96, providing for continuous movement. Additional adjustments avoided displacements and further reduced economic impacts to agricultural resources, resulting in the alignment presented here today.

Final comments from each attendee, by office:

Peach County
Billie Segars: We like the concept. You might want to look into buying right-of-way for four lanes.
Are there any wetlands along the alignment?

Response – Dave Peters: There are no wetlands, just one ephemeral stream. Funmi, could this possibly be a CE or would it more likely be an EA /FONSI?
Response – Funmi Adesesan: Probably an EA since it's generally on new location.
Response – Katy Allen: Should be an EA, there may be impacts we haven't found yet and other alignments may be considered during concept development.

Billie Segars: We have an agreement with the railroad to close the crossing at Silvandale Road once the bypass is built and the bridge is open.
Response - Carol Perry: We need to have a copy of the agreement. I think it would be good to get a copy to the project manager too, for future reference.
Response - Dave Peters: Yes, we would like to have a copy.
Response – Billie Segars: We will try to find a copy and send it to you.

MEAG Power

Ben Boucher: Going between the poles is good, just be aware of the vertical clearance requirements; 25 feet in the field and 30 feet at the road.

GDOT OEL

Dave Peters: What's the status on the force main sewer line that was discussed at the initial concept meeting?

Response – Billie Segars: I'm pretty sure it's already in place.

(NOTE: This was confirmed by Keith Spillers of the Fort Valley Utilities Commission on June 17, 2009.)

GDOT Construction

Richard Marshall: Once this is built, it will increase traffic on SR 96. Maintenance may need to look at the pavement on SR 96 to be sure it's adequate to handle the increase.

Response - Thomas Howell: We need to take that into consideration before that section is due for maintenance. Another thing, Traffic Operations needs to review the need for a signal at SR 49 and the SR 49 Connector.

Response – Billie Segars: That may already be in the works. There have been a couple of bad accidents there already.

Response - Marcia Johnson: That signal project is in place and a signal will be installed before the SR 49 Connector Extension is built.

Middle GA RDC

Bob Rychel: Much needed project, Fort Valley would support anything that would relieve traffic in town.

FHWA

No additional comments

GB/MHB

Distribution: Genetha Rice-Singleton, Assistant Director of Preconstruction
Brent Story, P.E., State Road and Airport Design Engineer
Phil Copeland, State Right-of-Way Administrator
Keith Golden, P.E., State Traffic Safety and Design Engineer
Paul V. Liles, P.E., State Bridge Design Engineer
Randall Hart, State Construction Engineer
David Crim, State Maintenance Engineer
Georgene Geary, P.E., State Materials and Research Engineer
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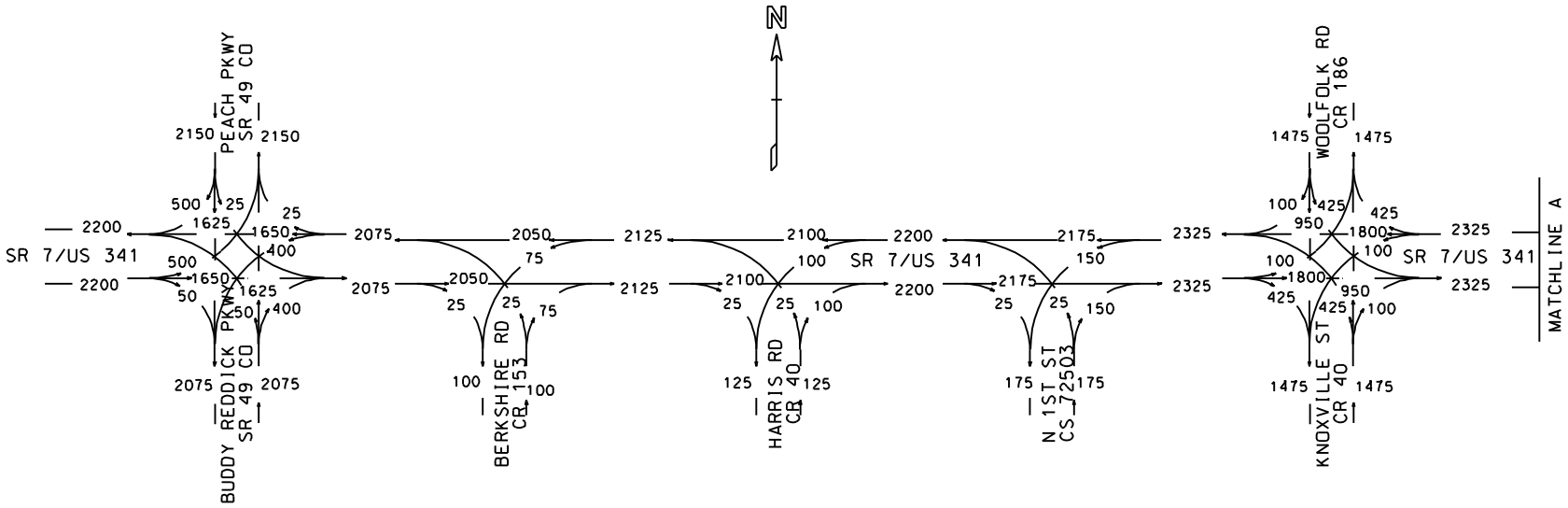
Brian Summers, Project Review Engineer
Thomas B. Howell, P.E., District Engineer, Thomaston
Cheryl Griffin, Preconstruction, Thomaston
Katy Allen, P.E., Federal Highway Administration
Chetna Dixon, Federal Highway Administration

SHEET 1 OF 5

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION

PEACH COUNTY



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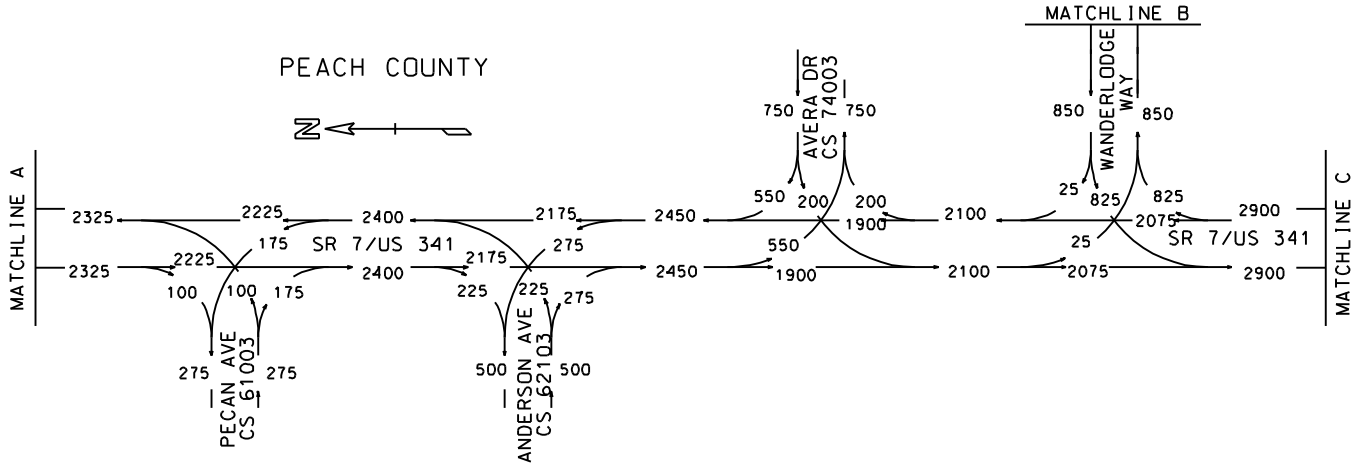

CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

EXISTING 2008

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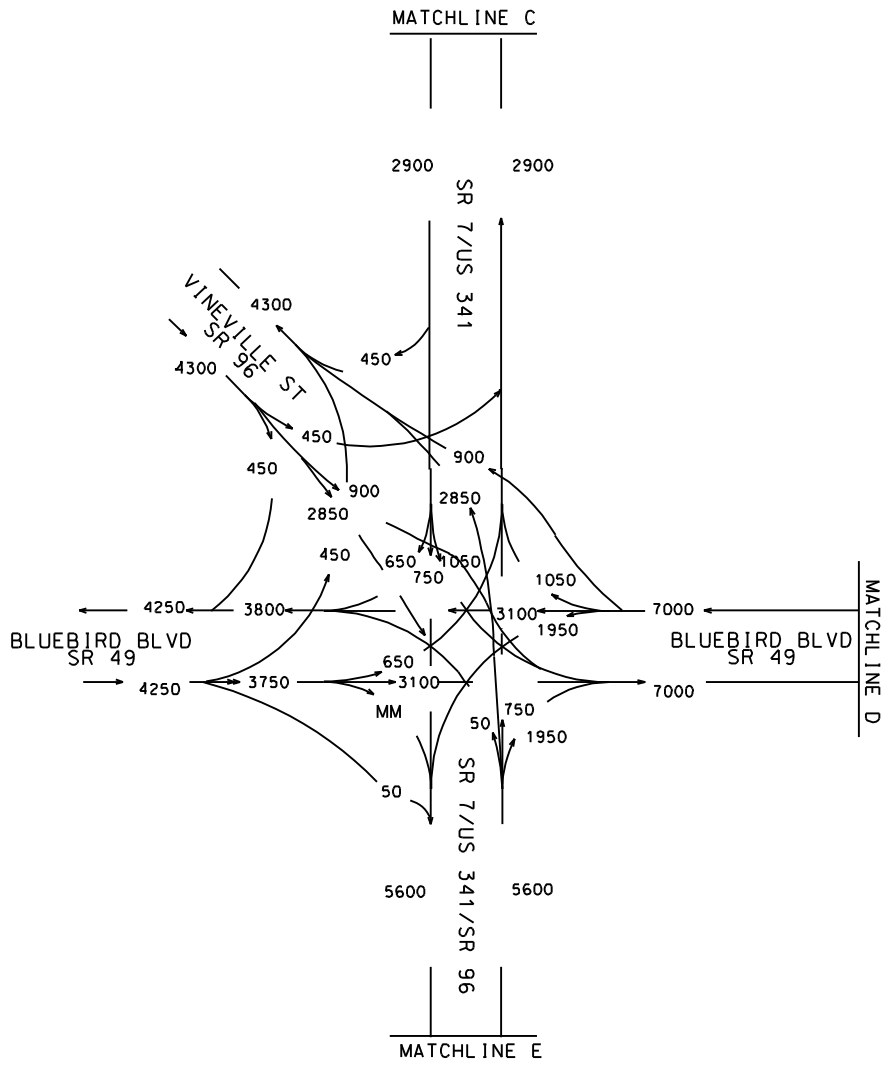
SHEET 2 OF 5

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION

PEACH COUNTY



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PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

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SHEET 3 OF 5

GEORGIA DEPARTMENT OF TRANSPORTATION
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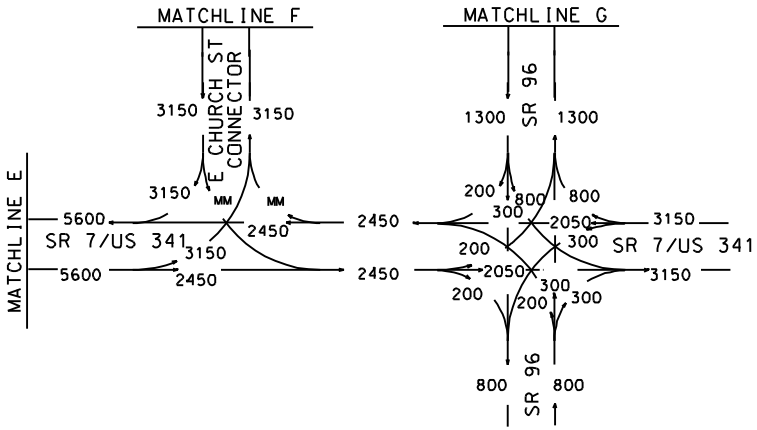

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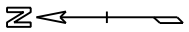

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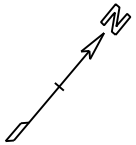

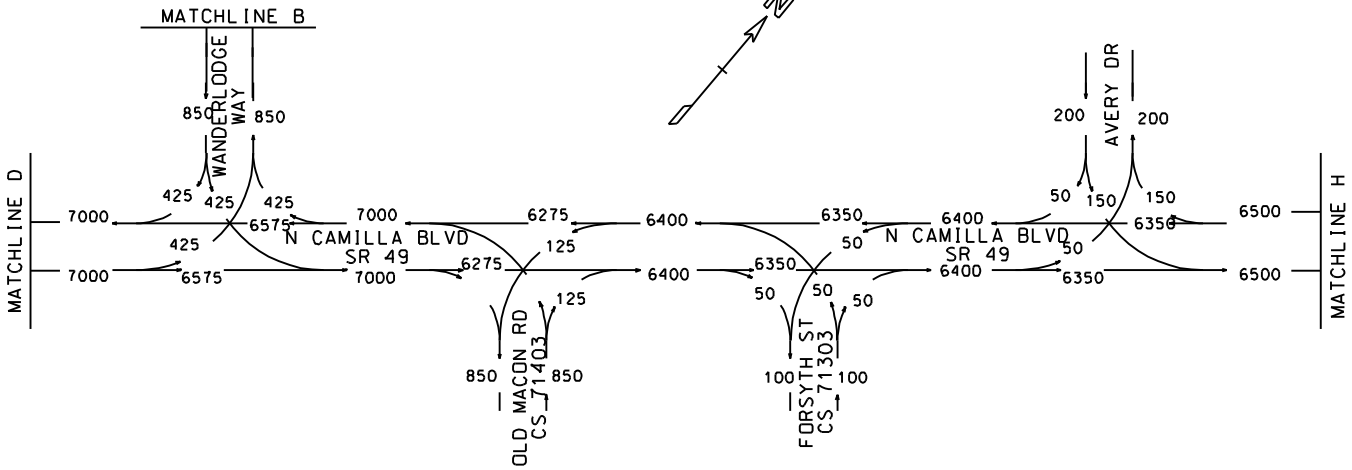

CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

EXISTING 2008

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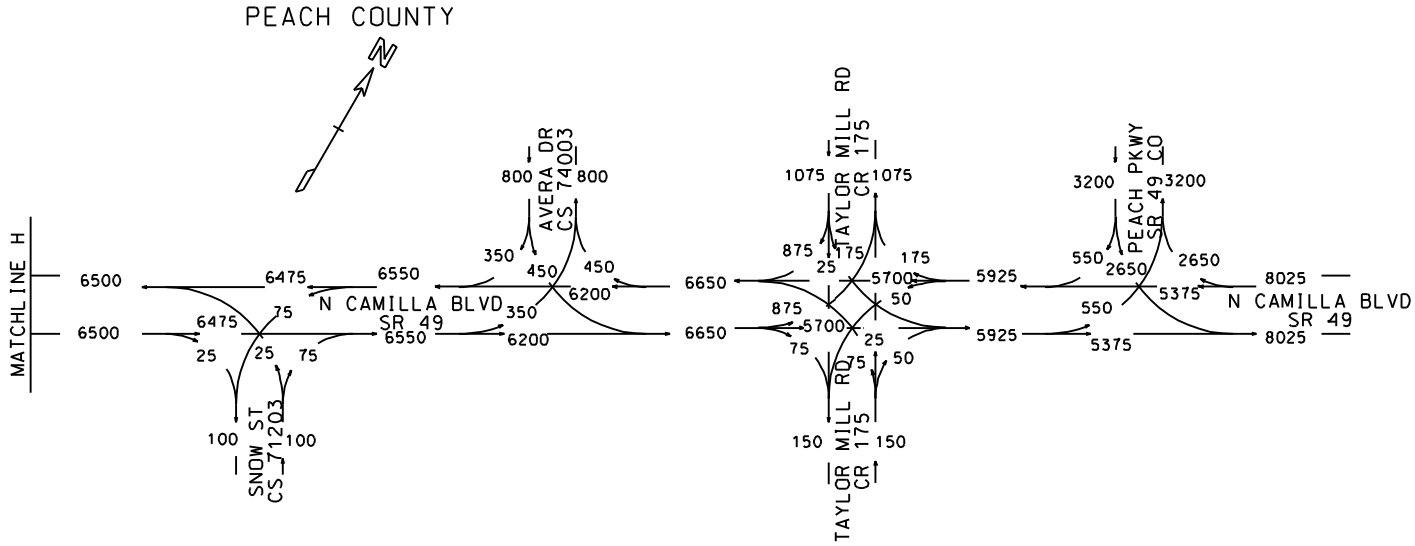
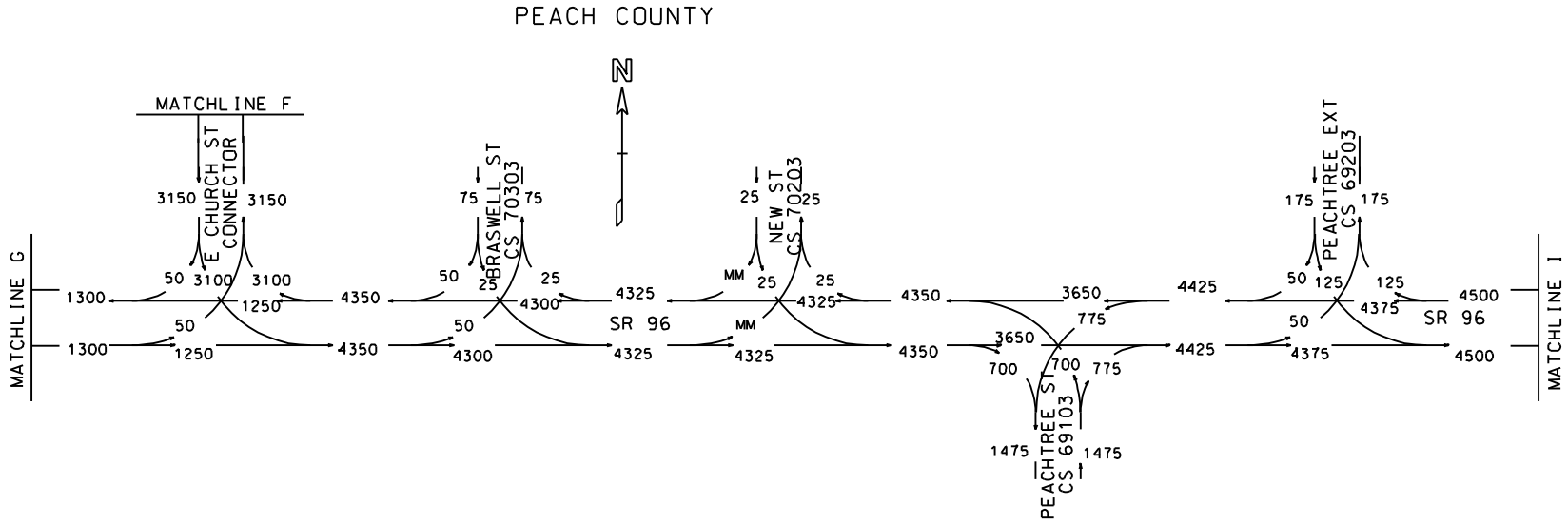
SHEET 4 OF 5

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION





CSSTP-0006-00(963)
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PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

EXISTING 2008

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SHEET 5 OF 5

GEORGIA DEPARTMENT OF TRANSPORTATION
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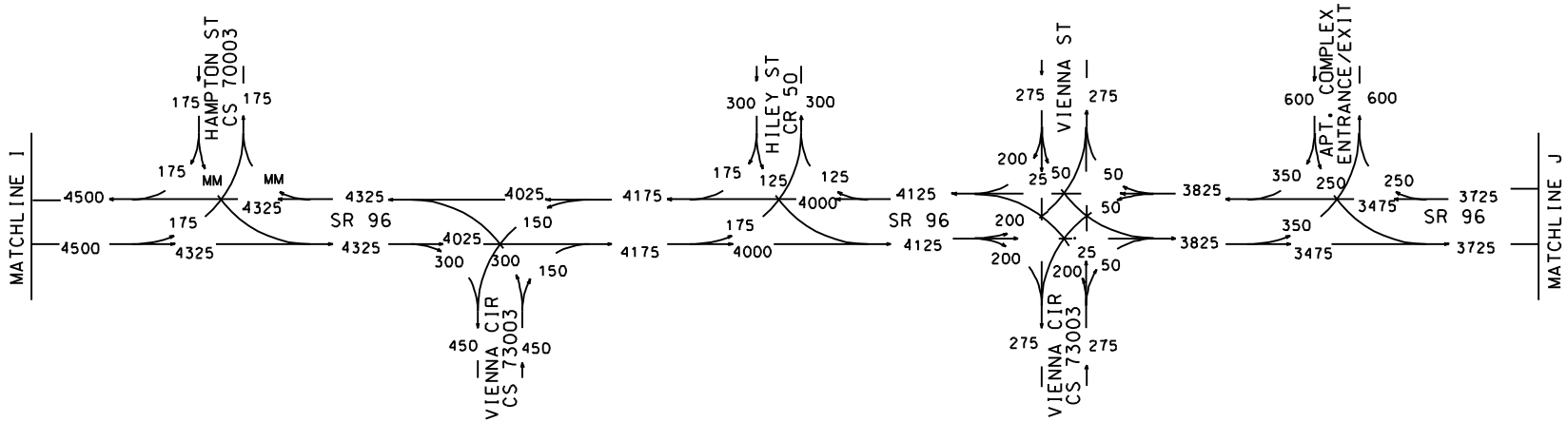
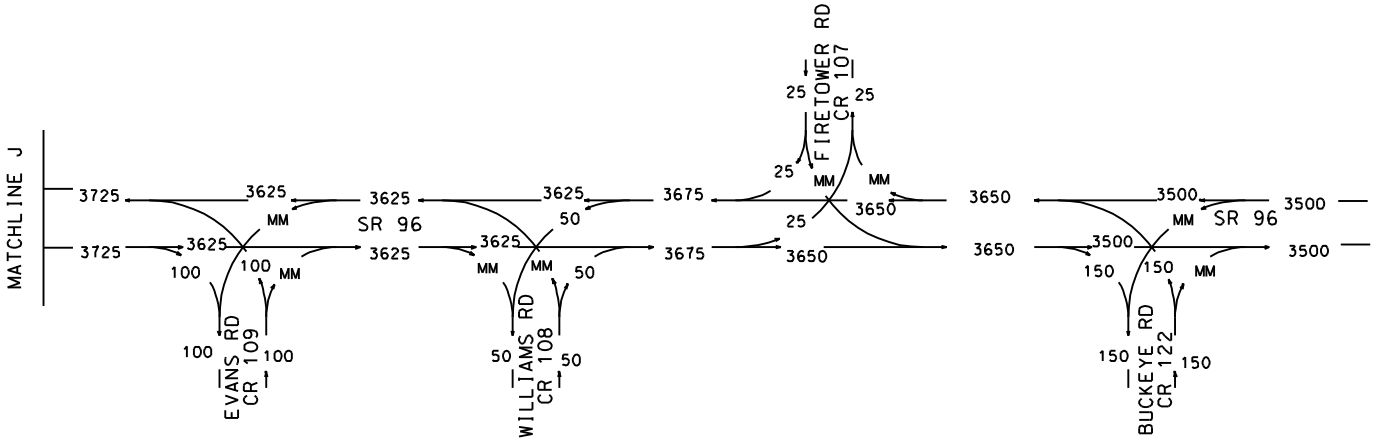


PEACH COUNTY



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CSSTP-0006-00(963)
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PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

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SHEET 1 OF 10

GEORGIA DEPARTMENT OF TRANSPORTATION
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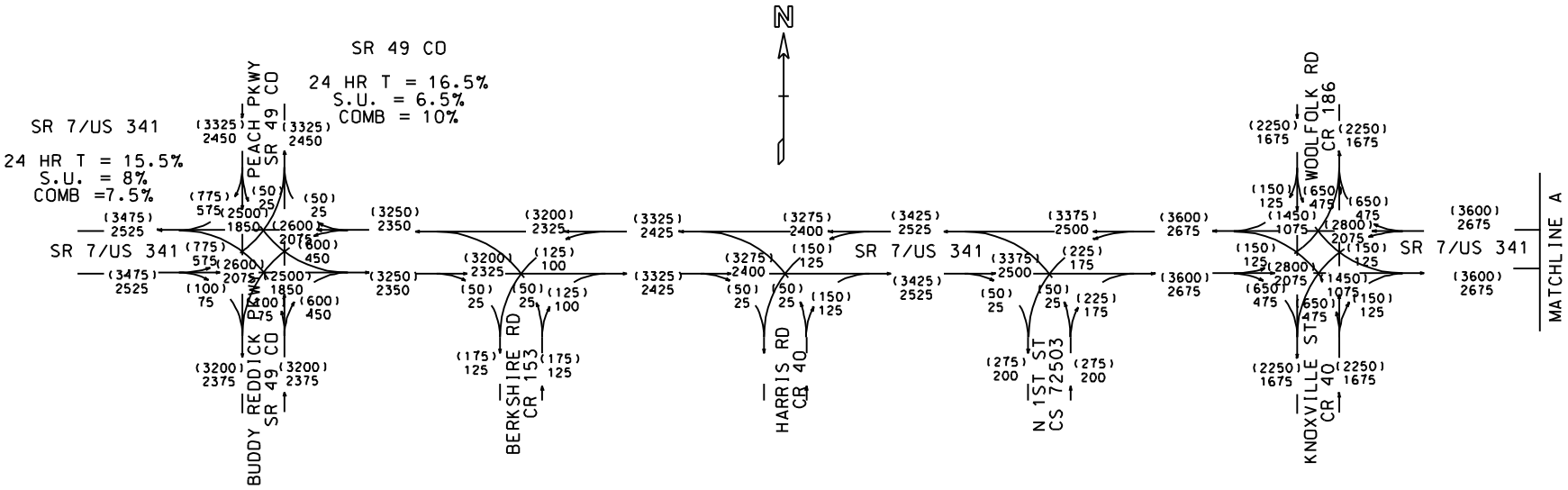
PEACH COUNTY



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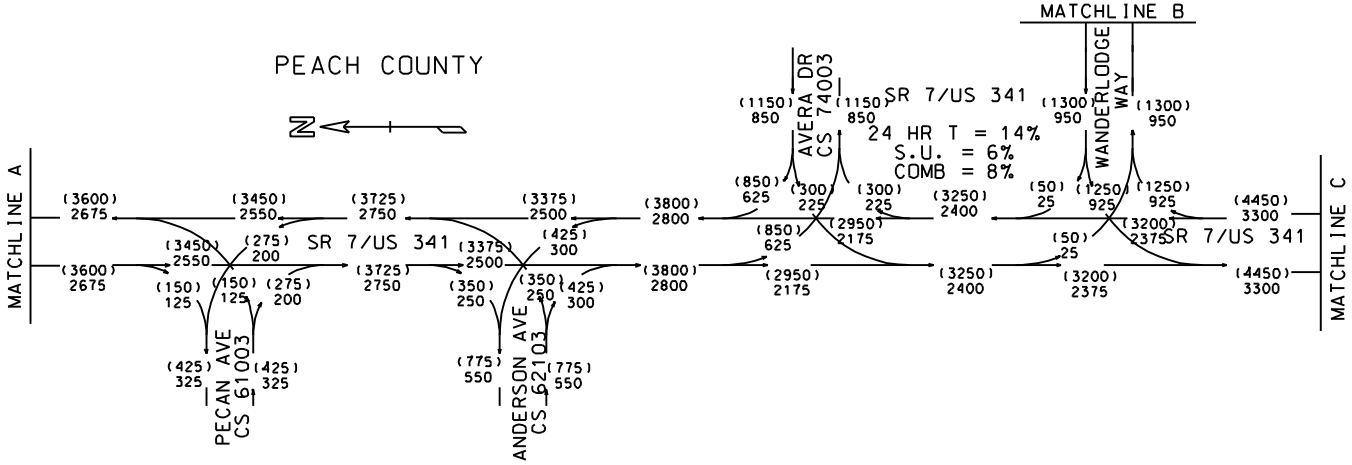

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PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

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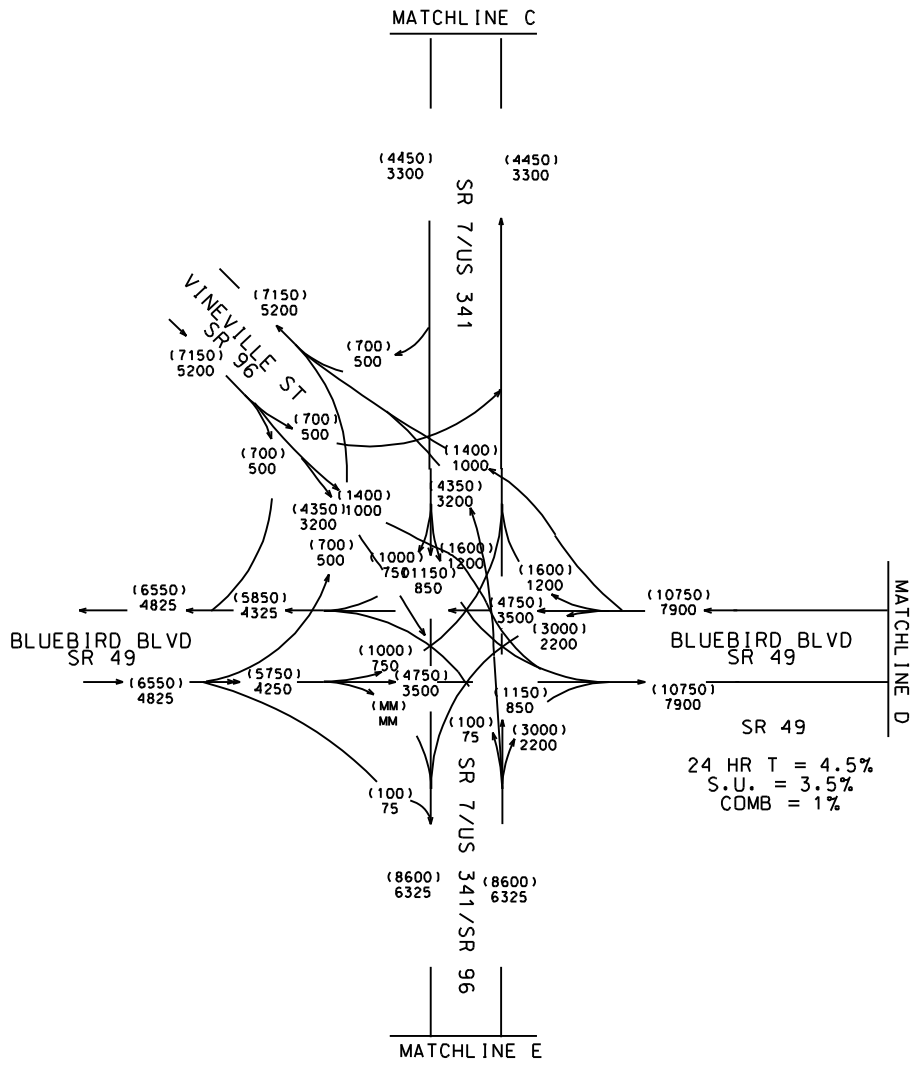
PEACH COUNTY



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SR 49 BYPASS FROM
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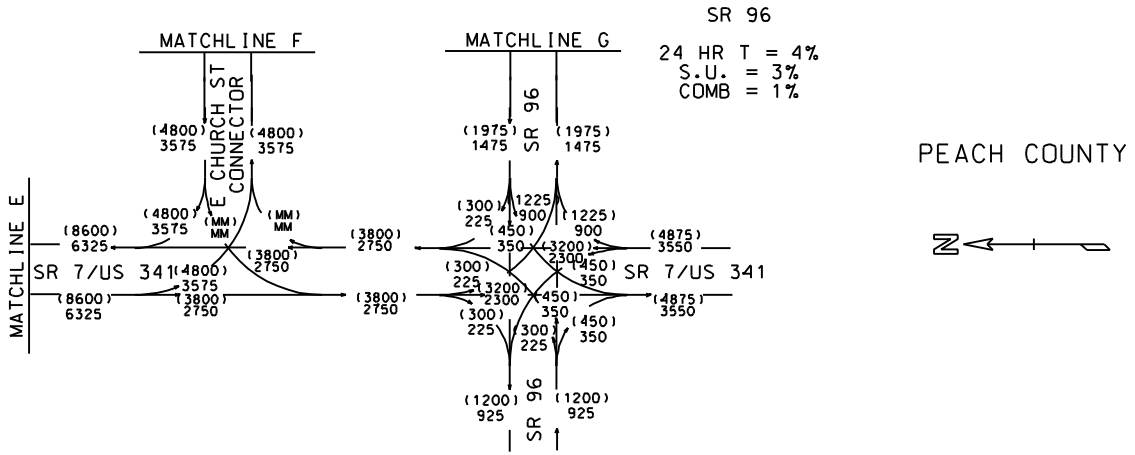

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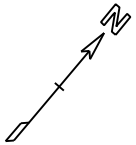

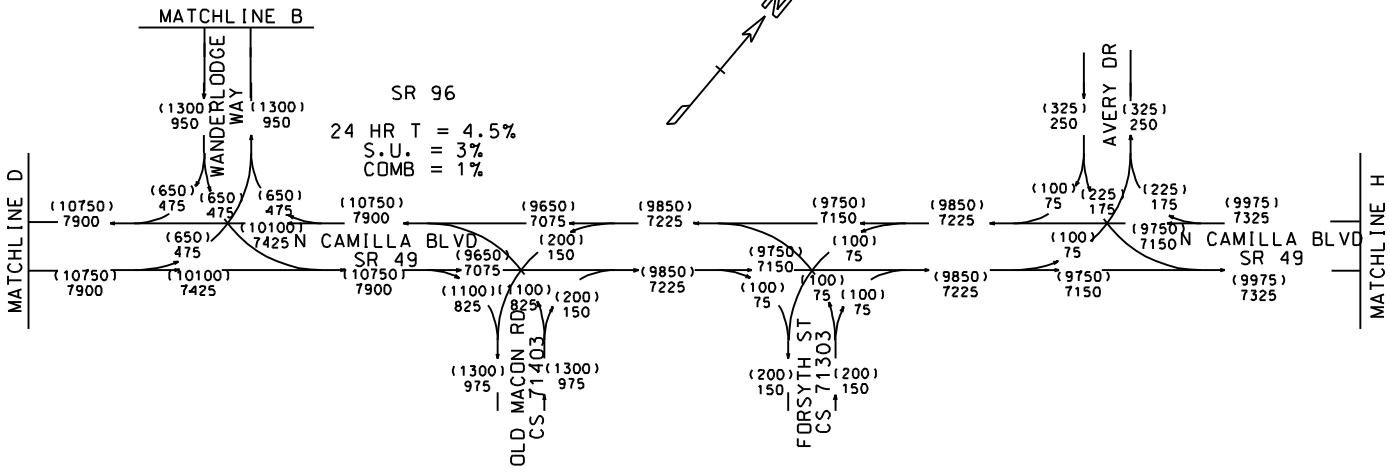

CSSTP-0006-00(963)
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PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2015/2035 NO BUILD ADT

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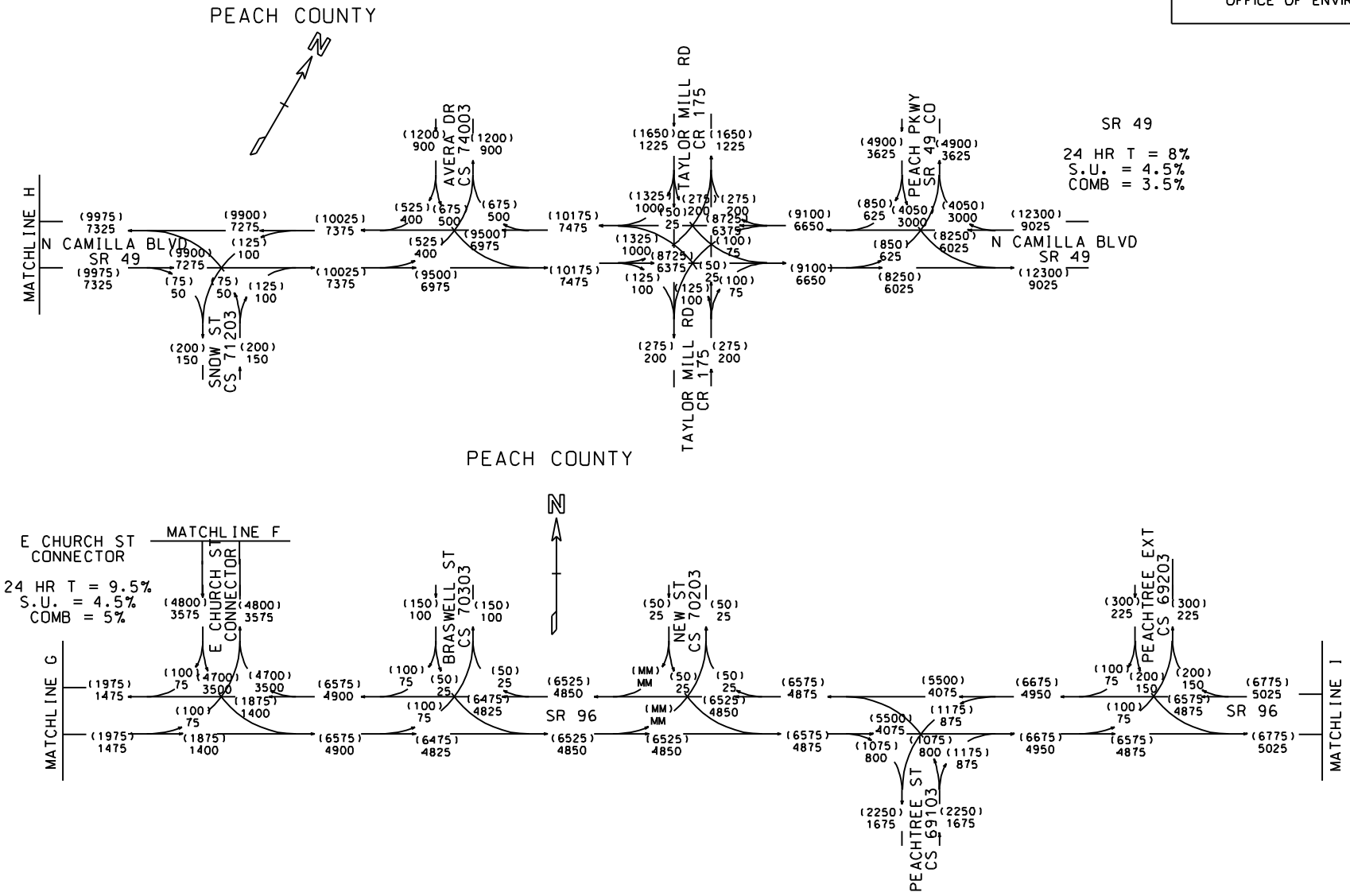
SHEET 4 OF 10

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2015/2035 NO BUILD ADT

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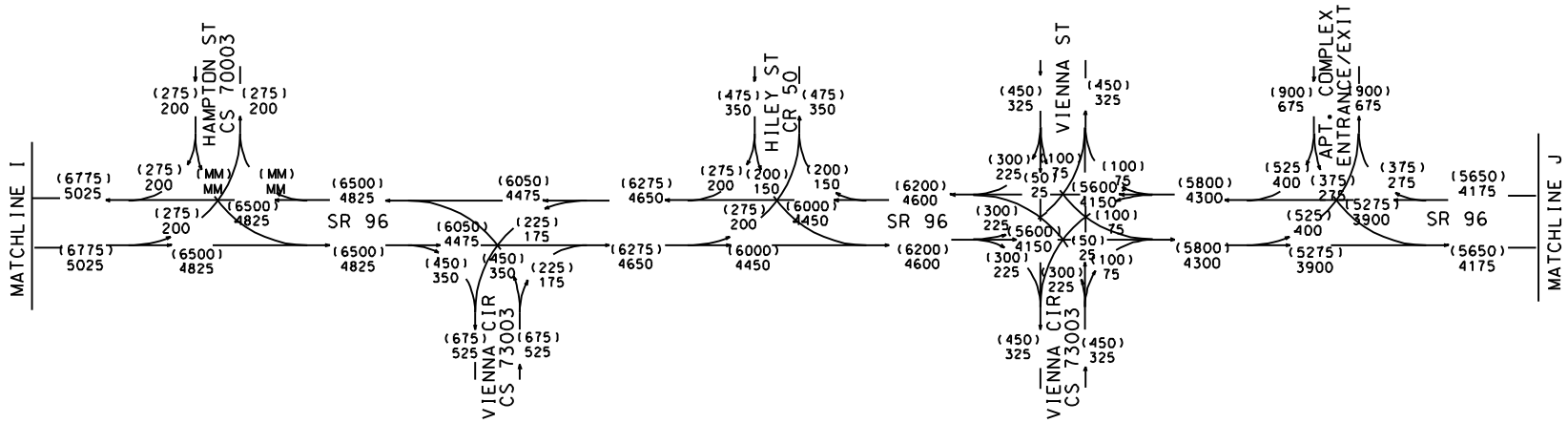
SHEET 5 OF 10

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



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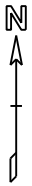

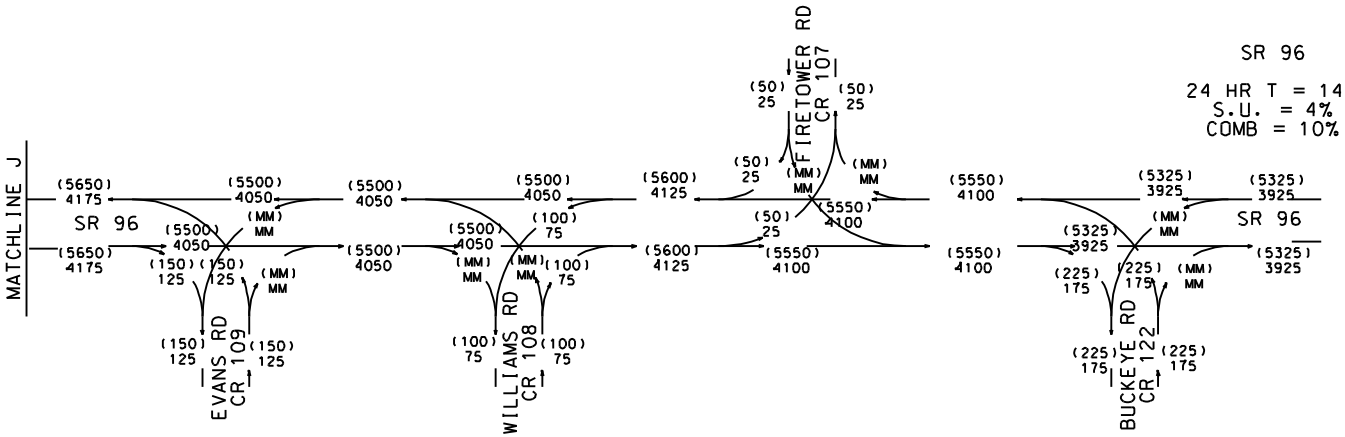

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CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2015/2035 NO BUILD ADT

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12/2008

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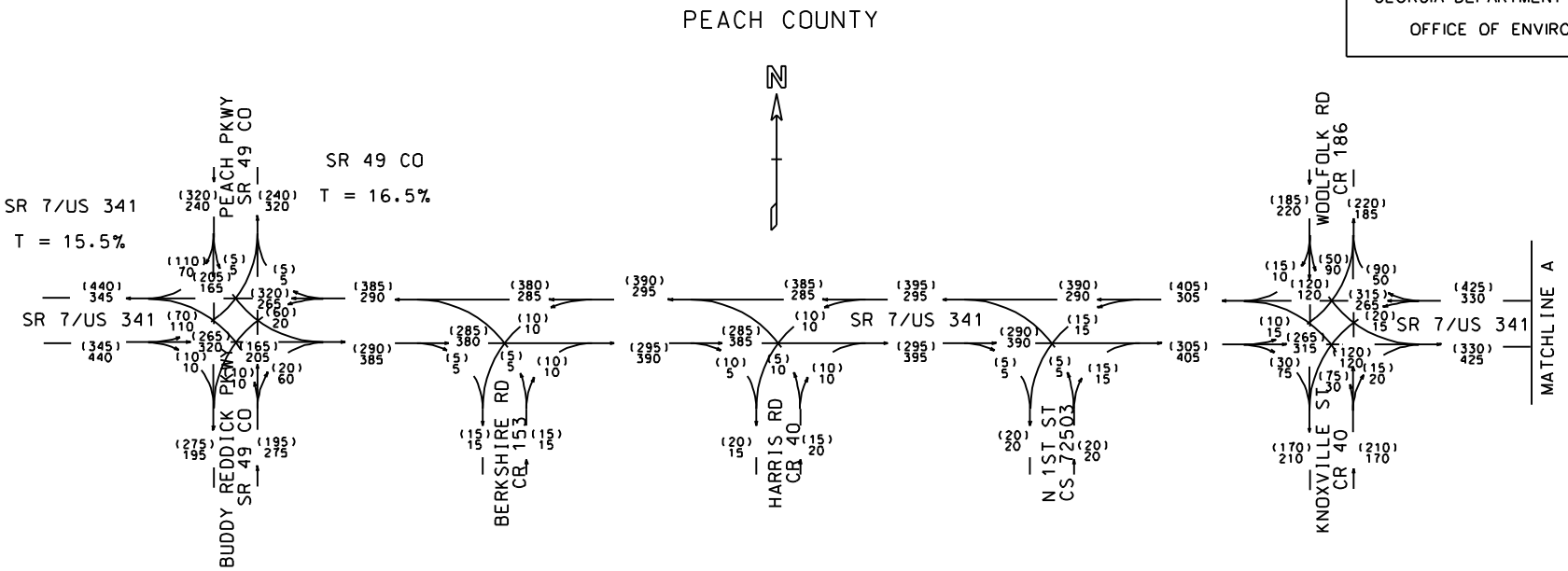
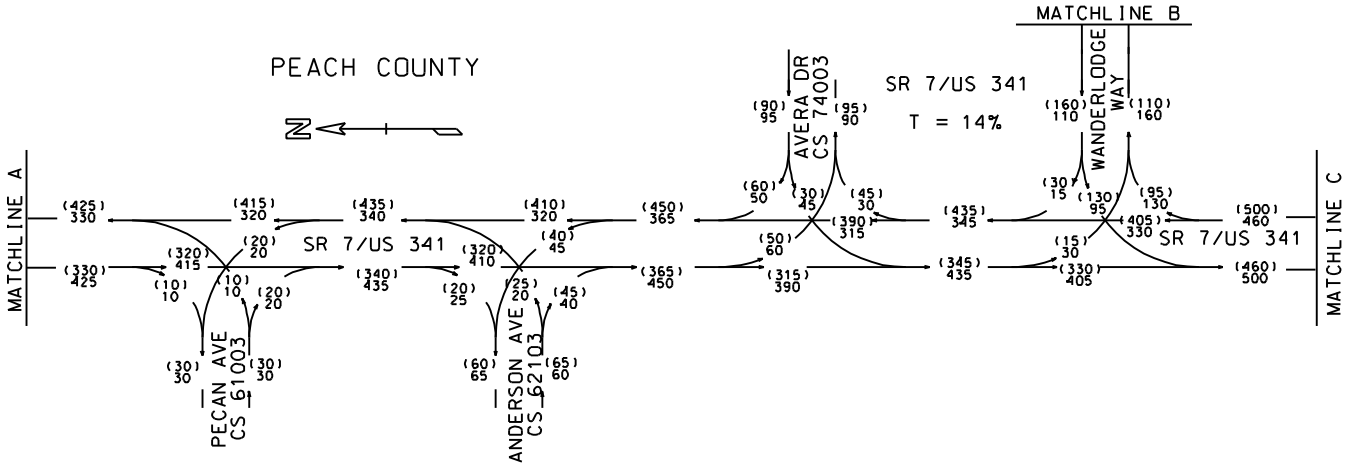
SHEET 6 OF 10

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION





CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2035 NO BUILD DHV
PM = (000)
AM = 000

RFN
12/2008

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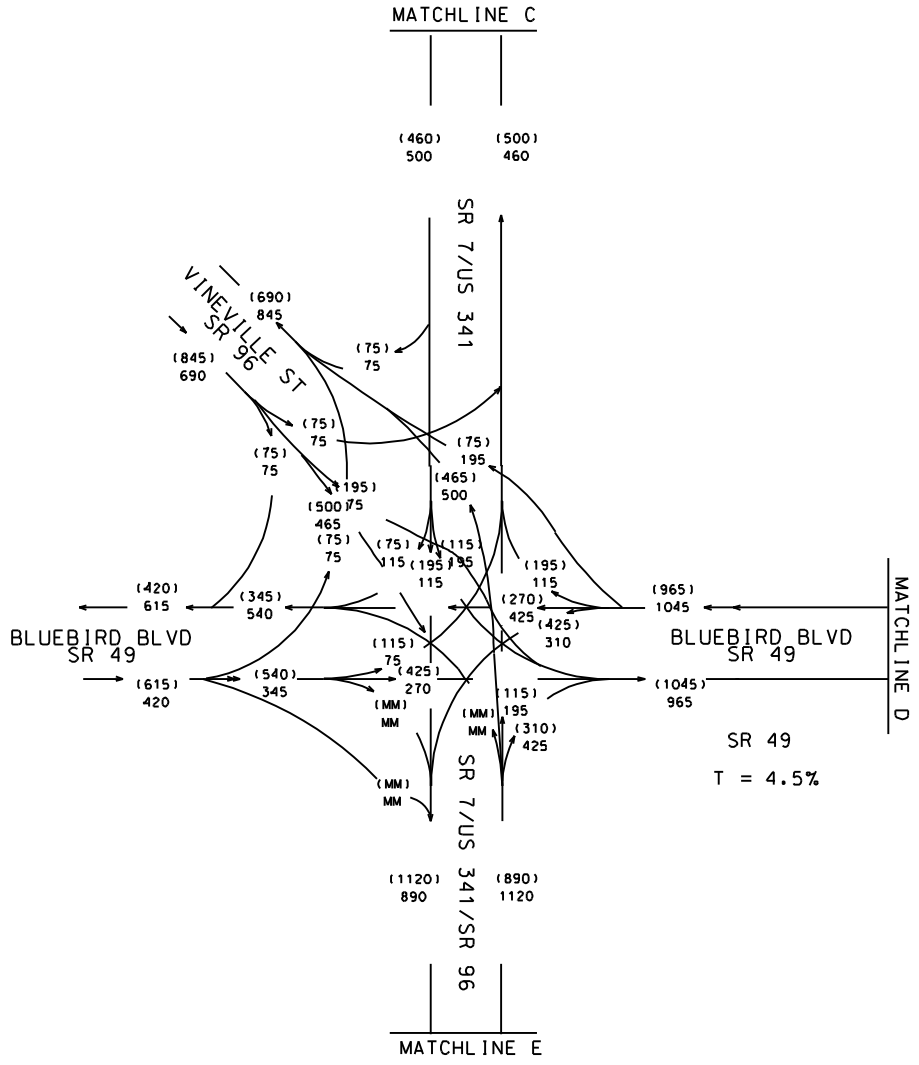
SHEET 7 OF 10

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION

PEACH COUNTY



N

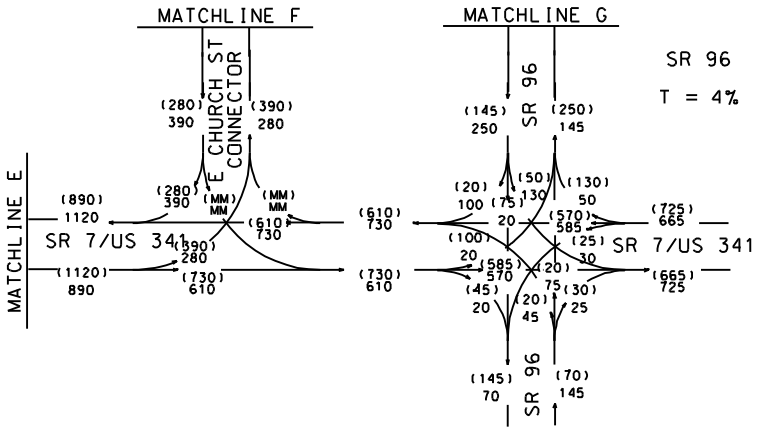
CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

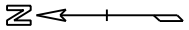
2035 NO BUILD DHV
PM = (000)
AM = 000

RFN
12/2008

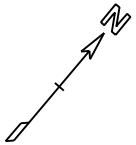
GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION

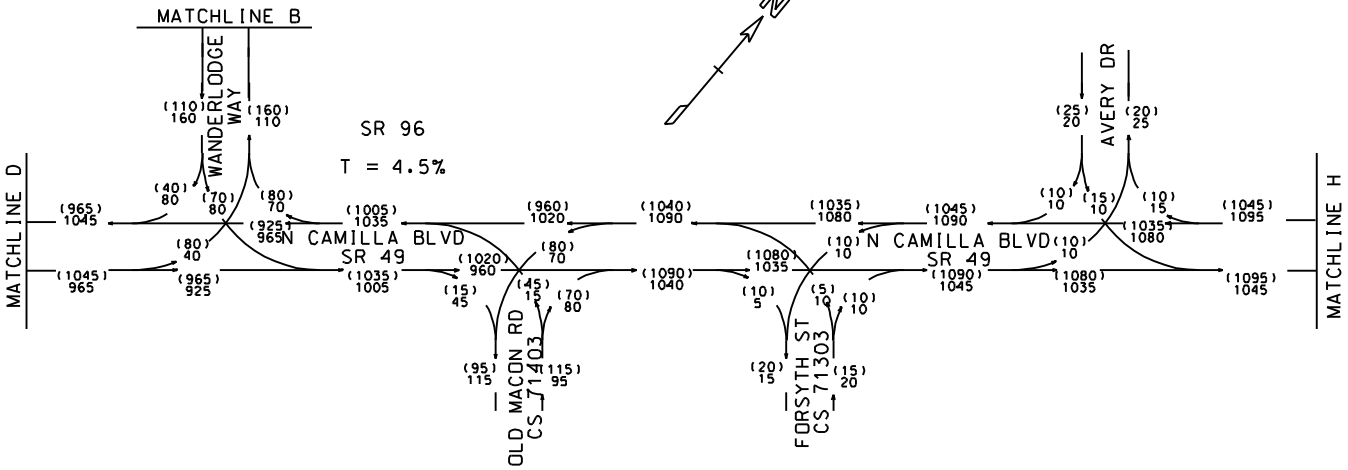


PEACH COUNTY



PEACH COUNTY





CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

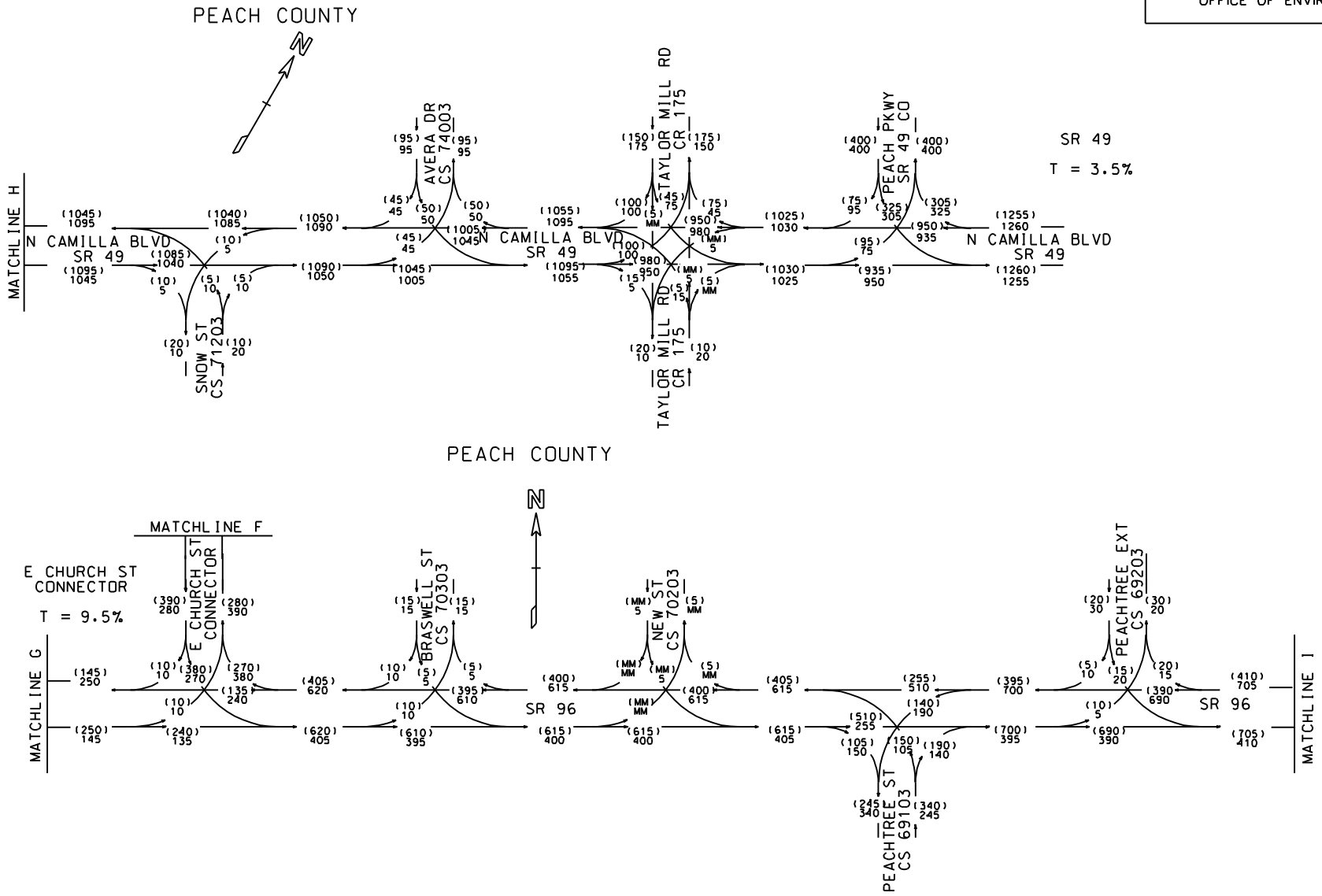
SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2035 NO BUILD DHV
PM = (000)
AM = 000

RFN
12/2008

SHEET 9 OF 10

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

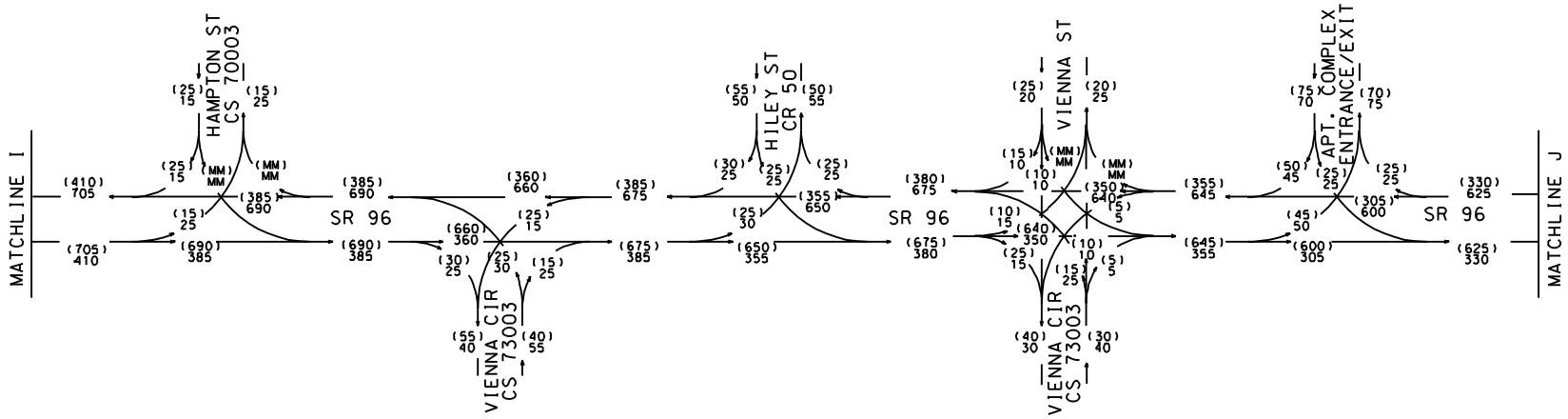
SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2035 NO BUILD DHV
PM = (000)
AM = 000

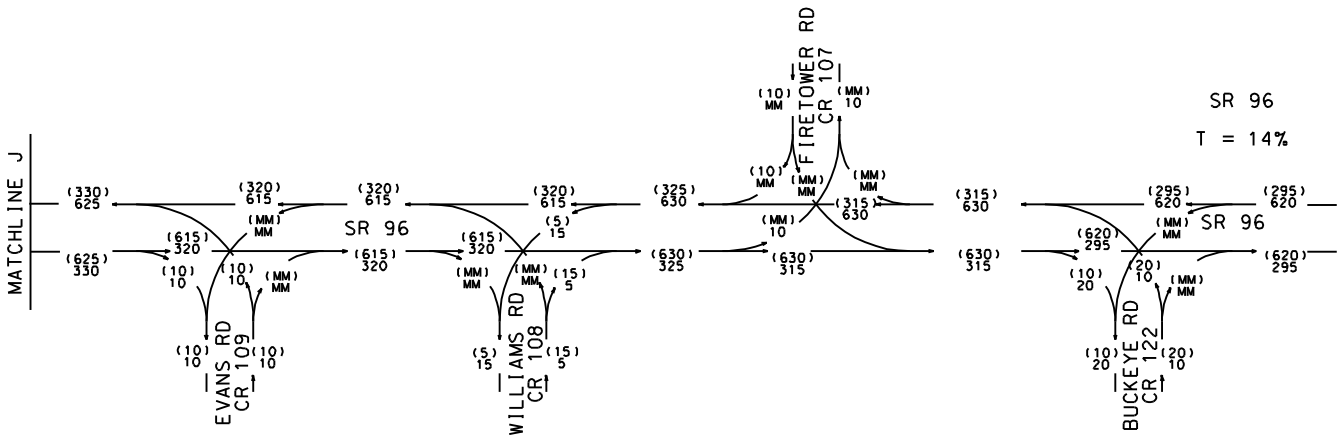
RFN
12/2008

SHEET 10 OF 10

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



PEACH COUNTY



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CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2035 NO BUILD DHV
PM = (000)
AM = 000

RFN
12/2008

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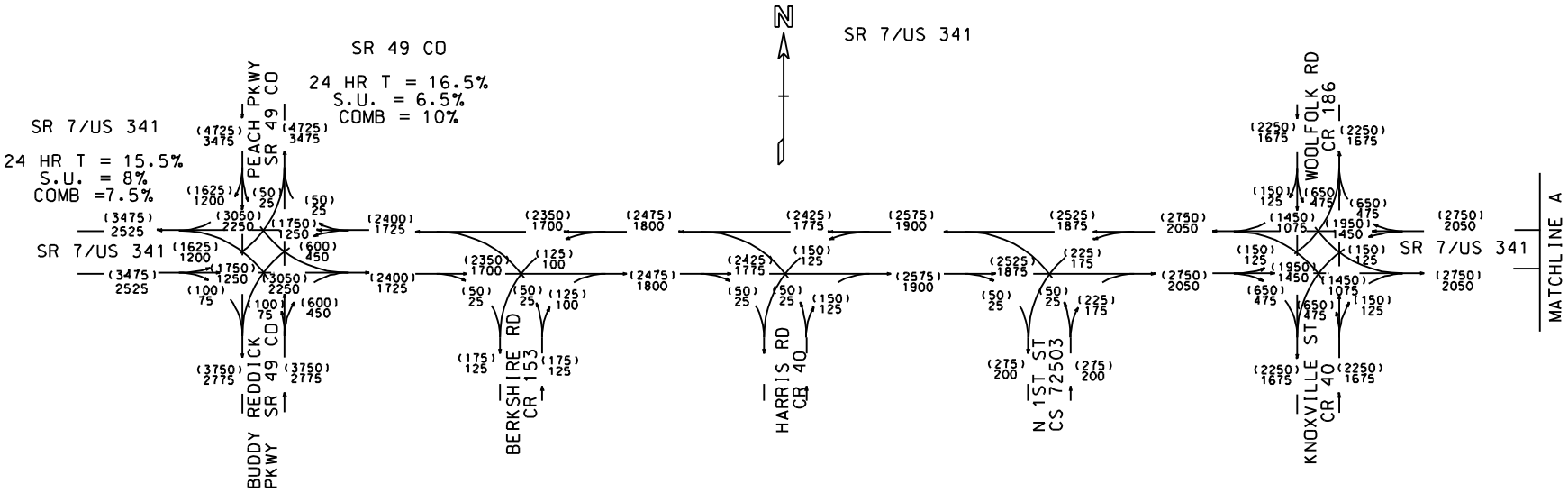
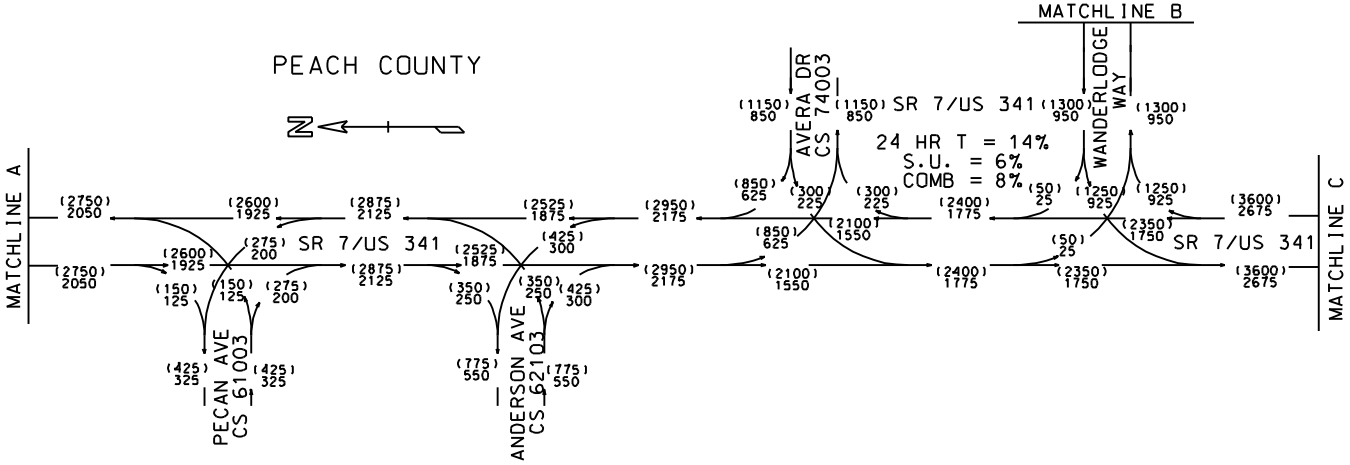
SHEET 1 OF 12

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION

PEACH COUNTY



PEACH COUNTY



CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

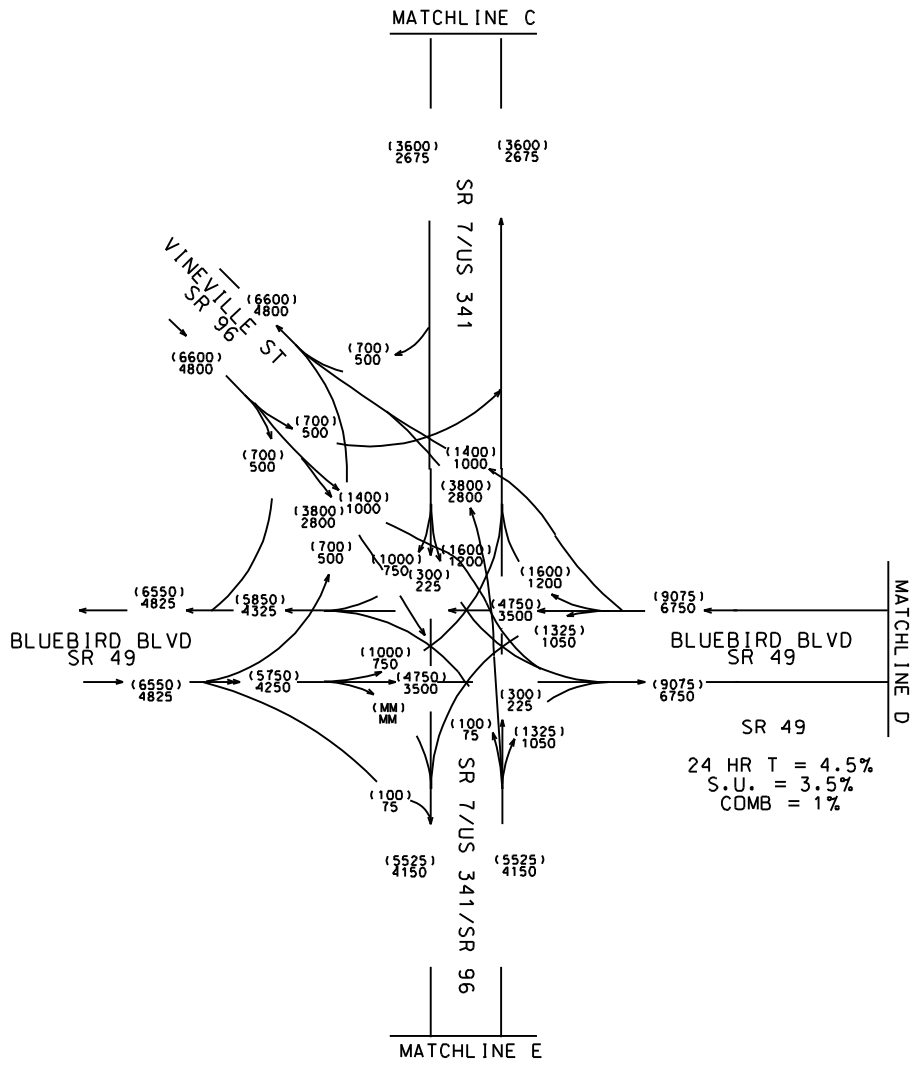
SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2015/2035 BUILD ADT

RFN
12/2008

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION

PEACH COUNTY



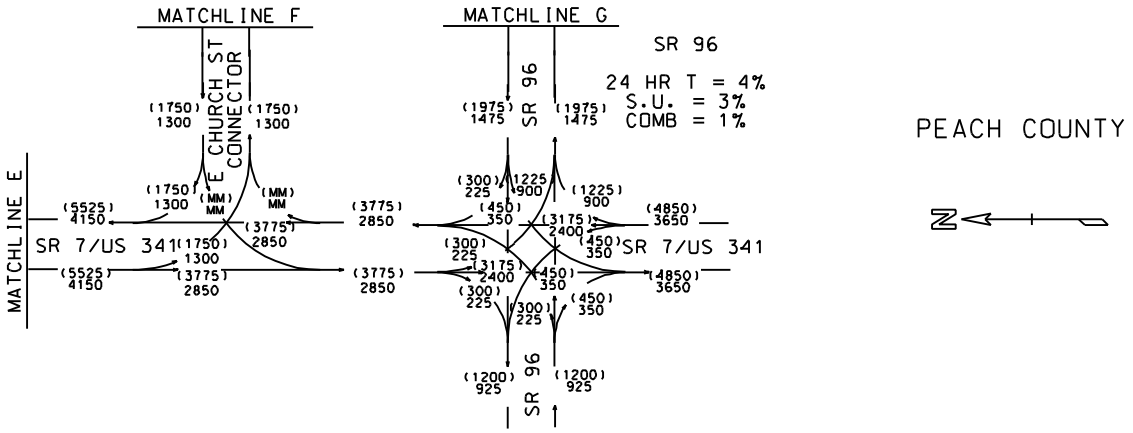
24 HR T = 4.5%
S.U. = 3.5%
COMB = 1%

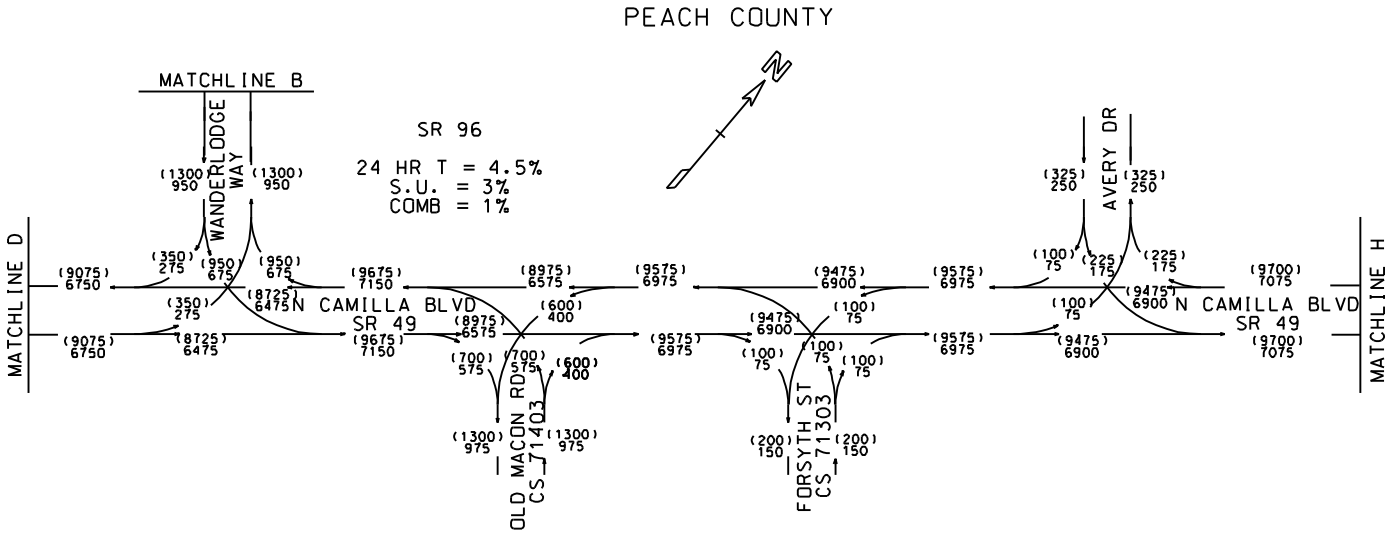
CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2015/2035 BUILD ADT
RFN
12/2008

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION





CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

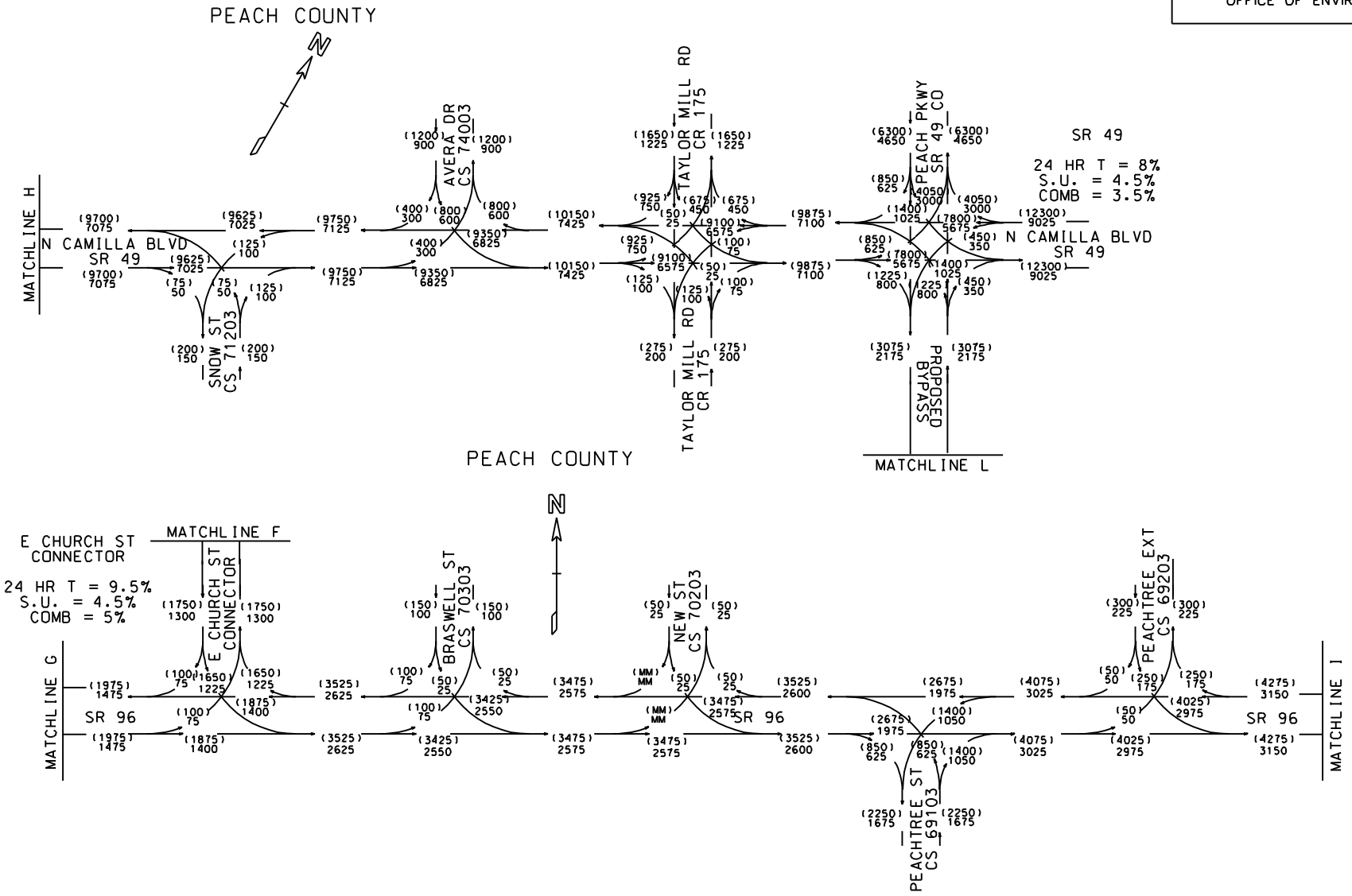
SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2015/2035 BUILD ADT

RFN
12/2008

SHEET 4 OF 12

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2015/2035 BUILD ADT

RFN
12/2008

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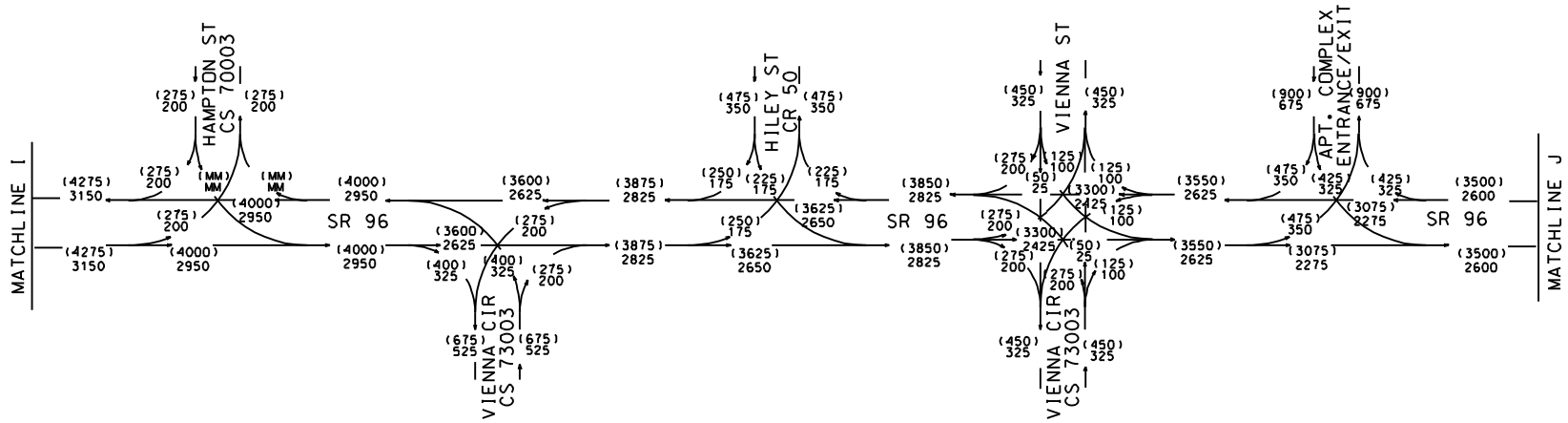
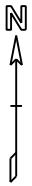
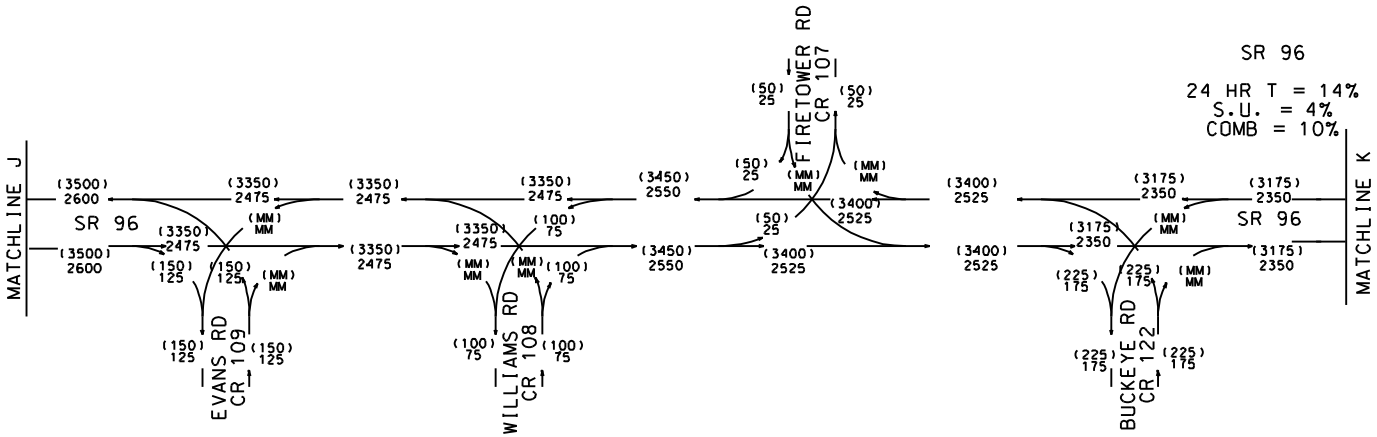
SHEET 5 OF 12

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



PEACH COUNTY





SR 96

24 HR T = 14%
S.U. = 4%
COMB = 10%

CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2015/2035 BUILD ADT

RFN
12/2008

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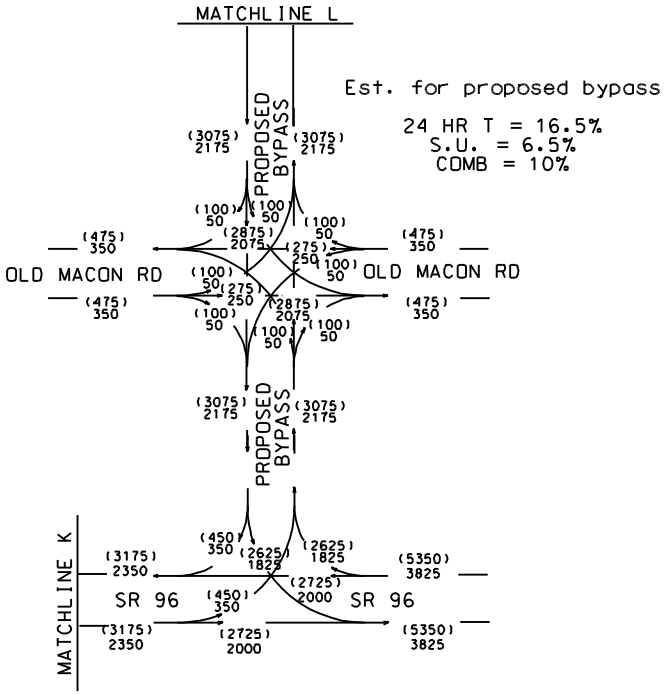
GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



Est. for proposed bypass

24 HR T = 16.5%
S.U. = 6.5%
COMB = 10%

PEACH COUNTY

N

CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

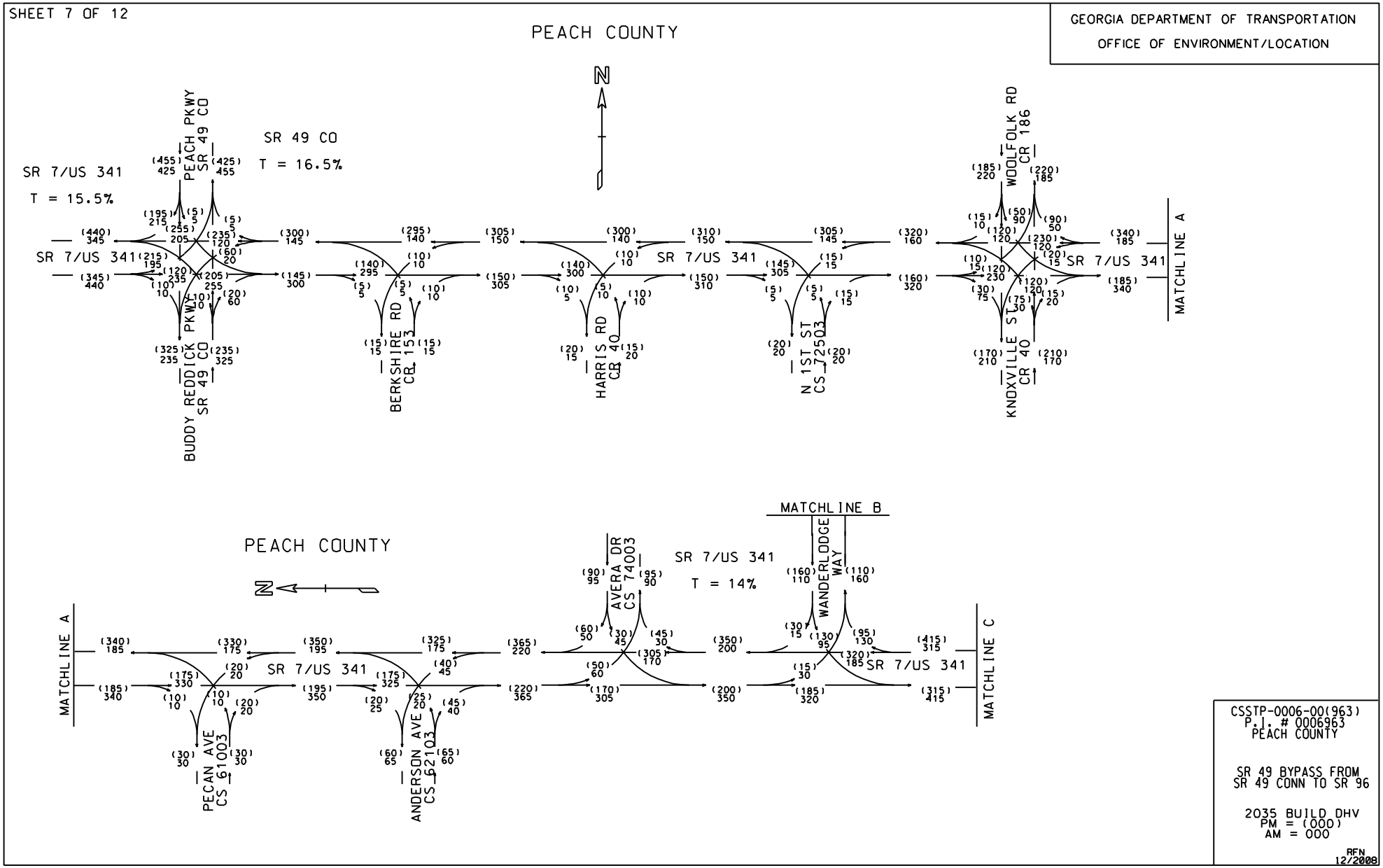
SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2015/2035 BUILD ADT

RFN
12/2008

SHEET 7 OF 12

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2035 BUILD DHV
PM = (000)
AM = 000

RFN
12/2008

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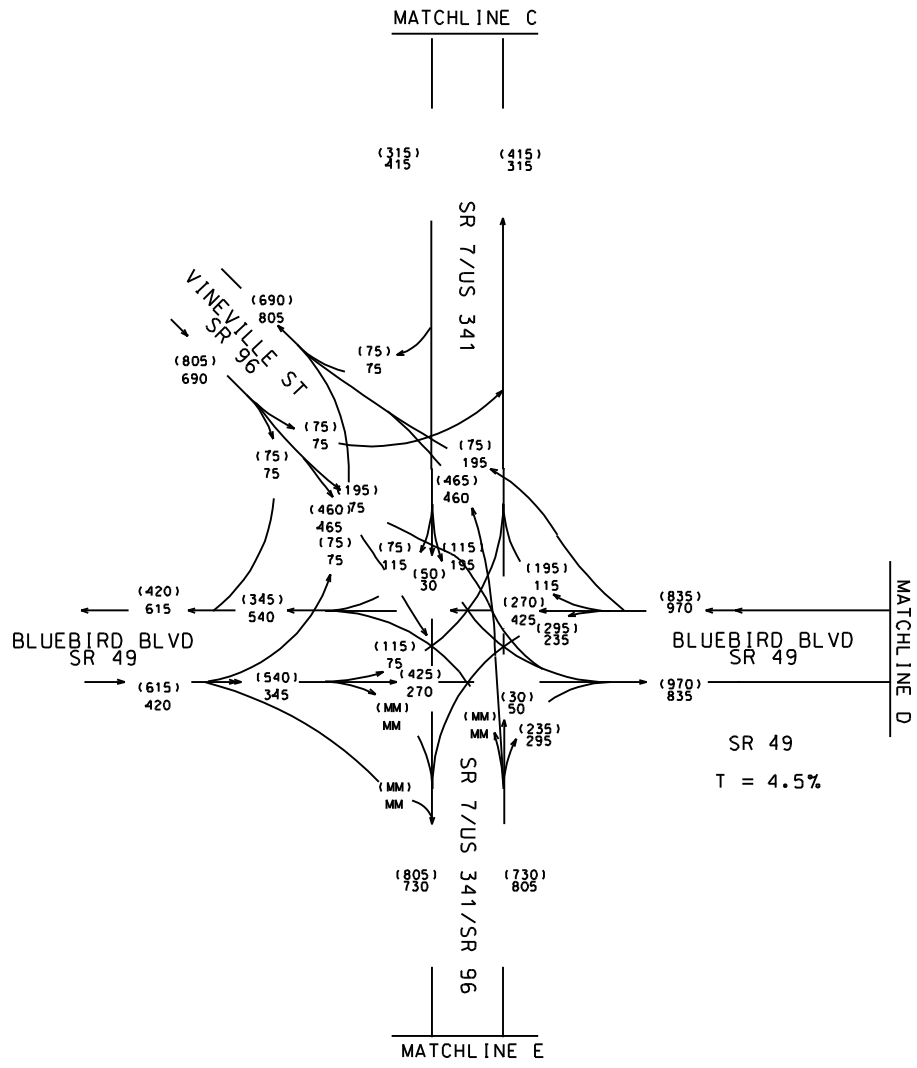
GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION

PEACH COUNTY



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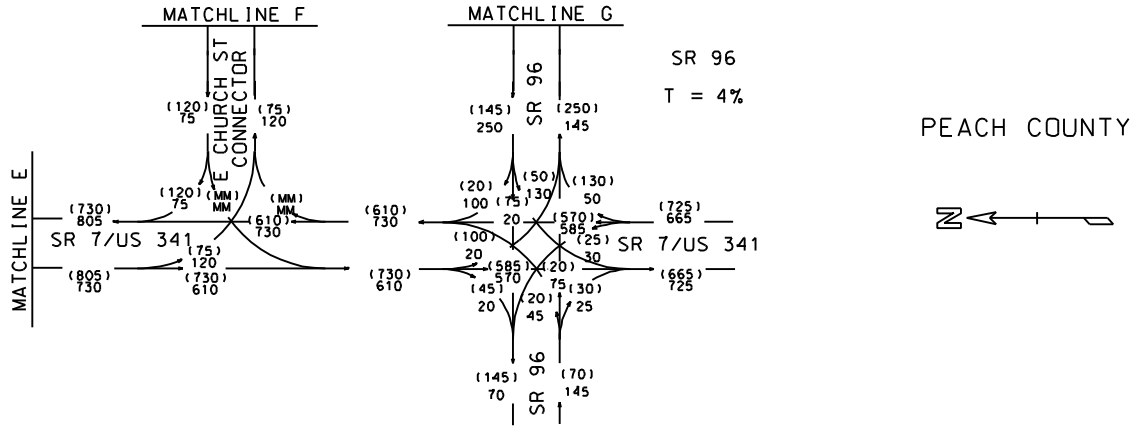
CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

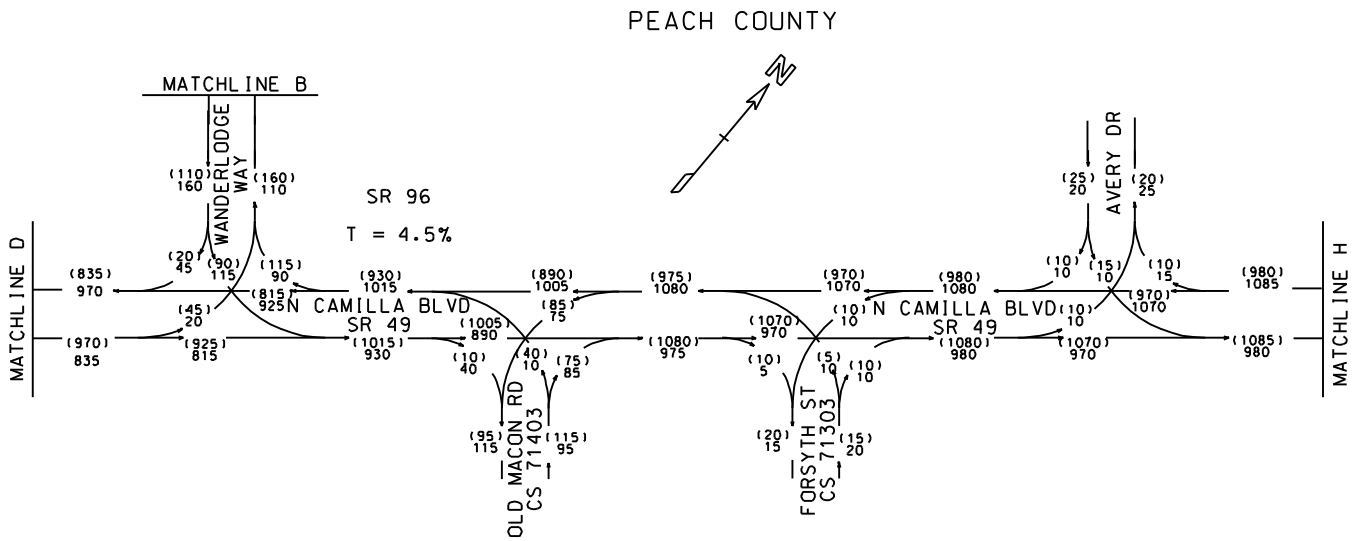
SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2035 BUILD DHV
PM = (000)
AM = 000

RFN
12/2008

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION





CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

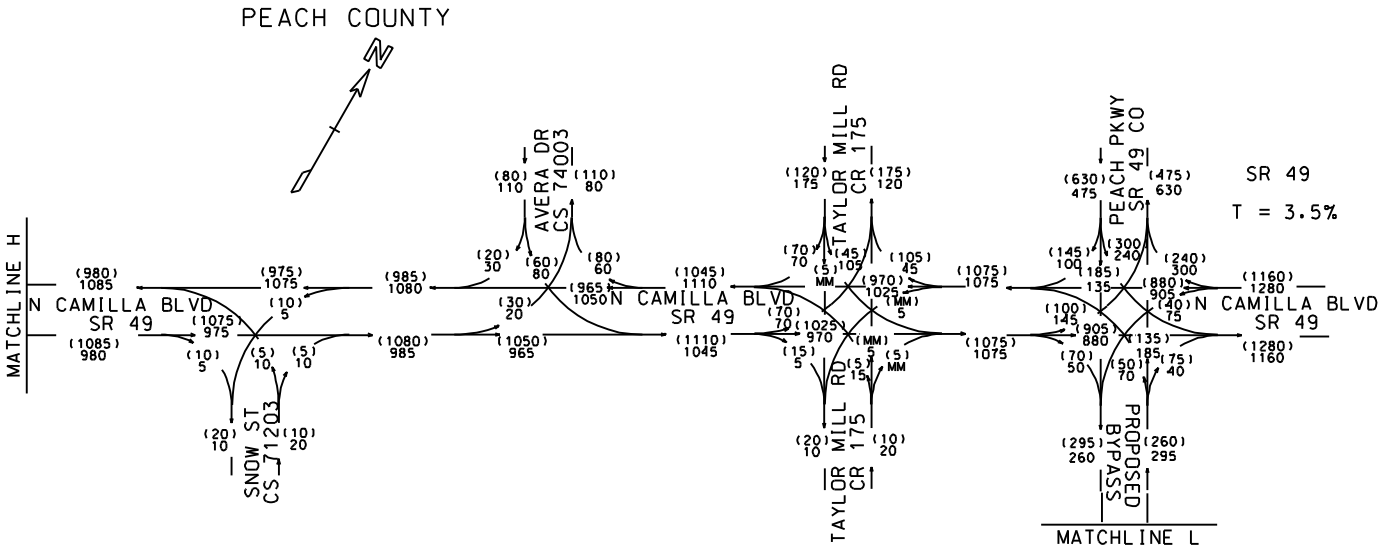
SR 49 BYPASS FROM
SR 49 CONN TO SR 96

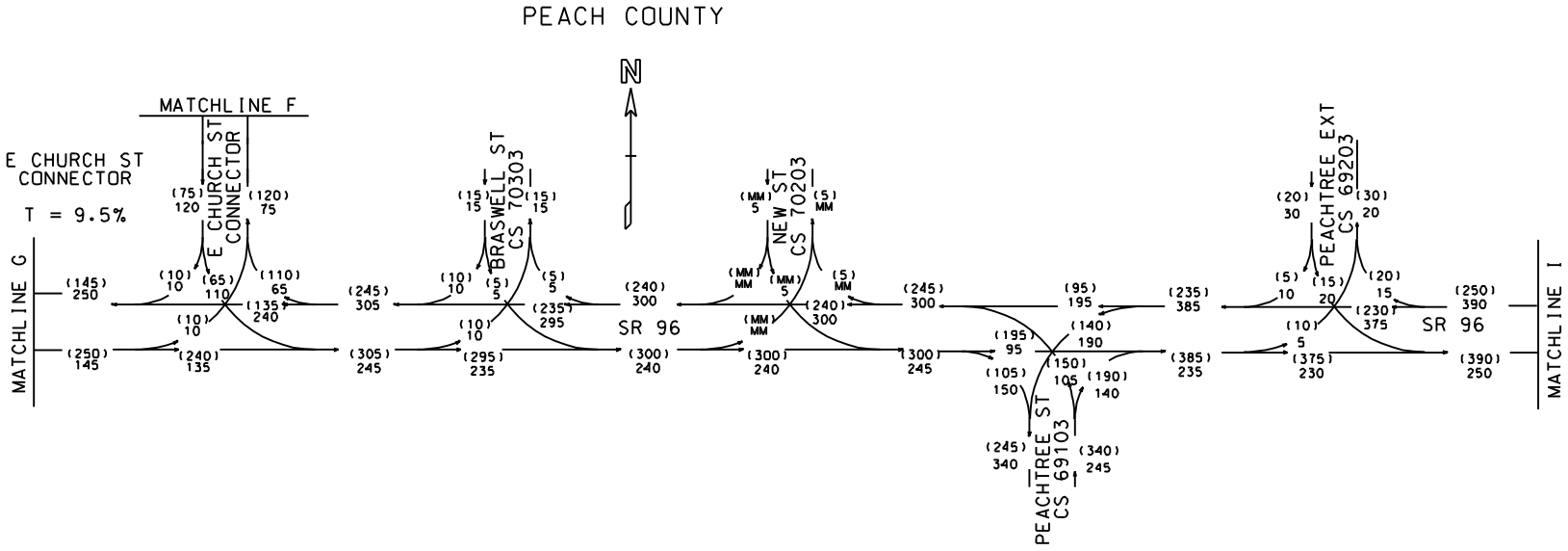
2035 BUILD DHV
PM = (000)
AM = 000

RFN
12/2008

SHEET 10 OF 12

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION





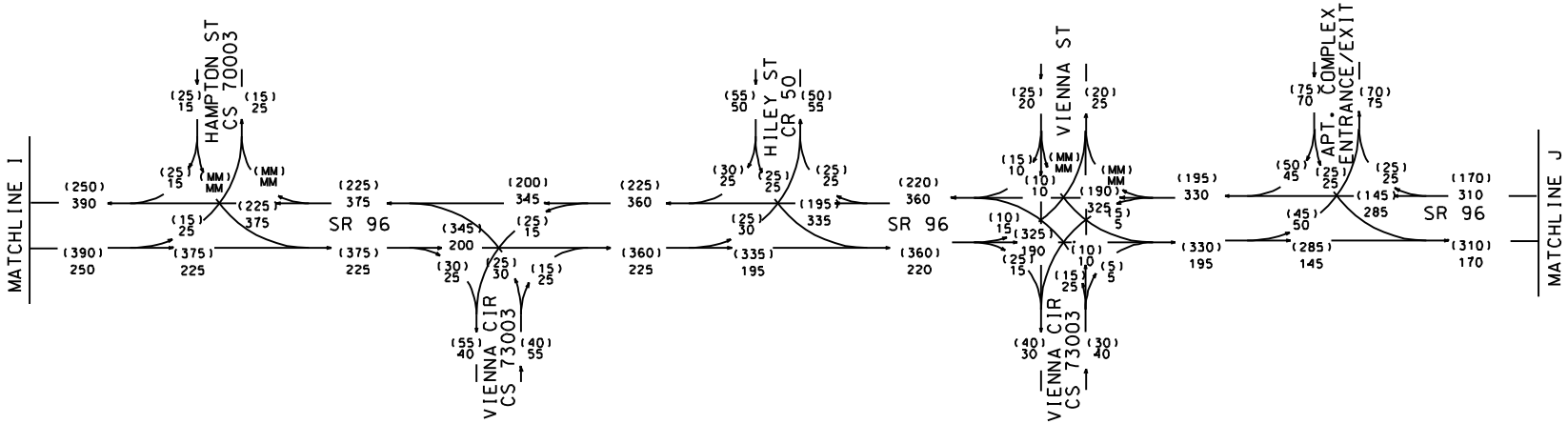
CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

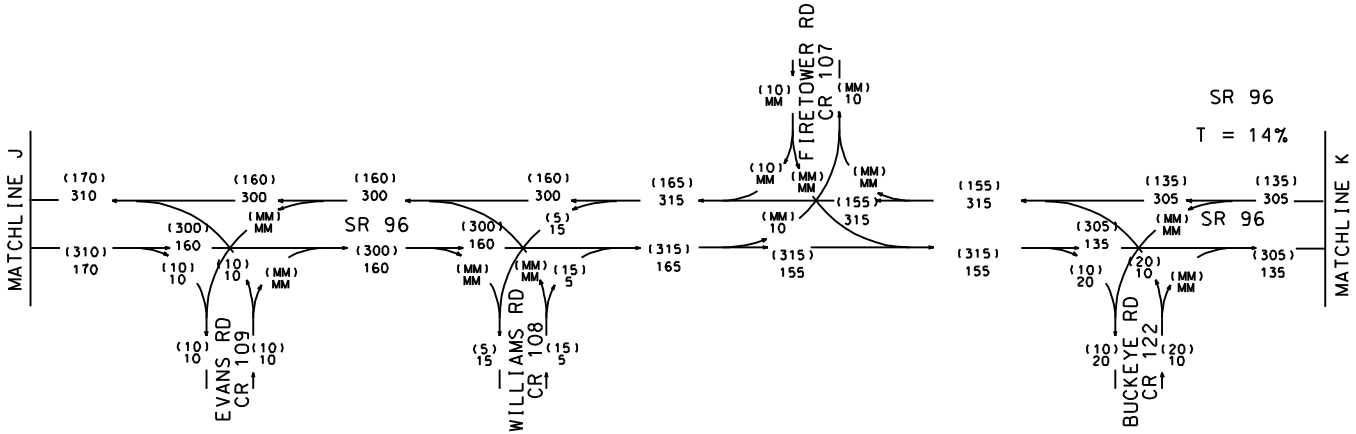
2035 BUILD DHV
PM = (000)
AM = 000

RFN
12/2008

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



PEACH COUNTY



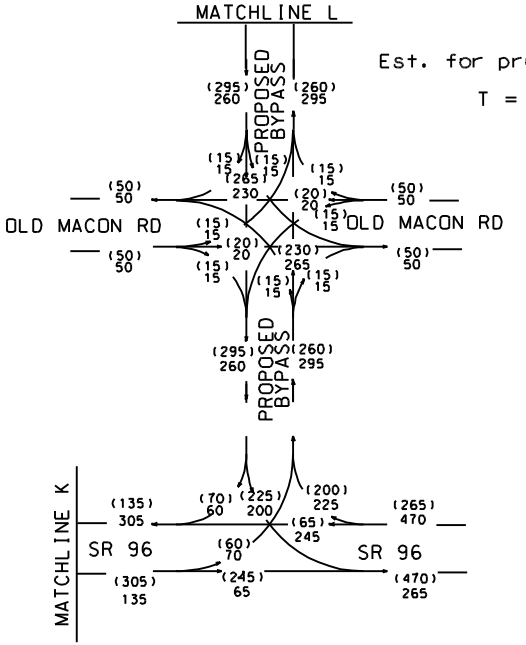
CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2035 BUILD DHV
PM = (000)
AM = 000

RFN
12/2008

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



Est. for proposed bypass

T = 16.5%

PEACH COUNTY

N

CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

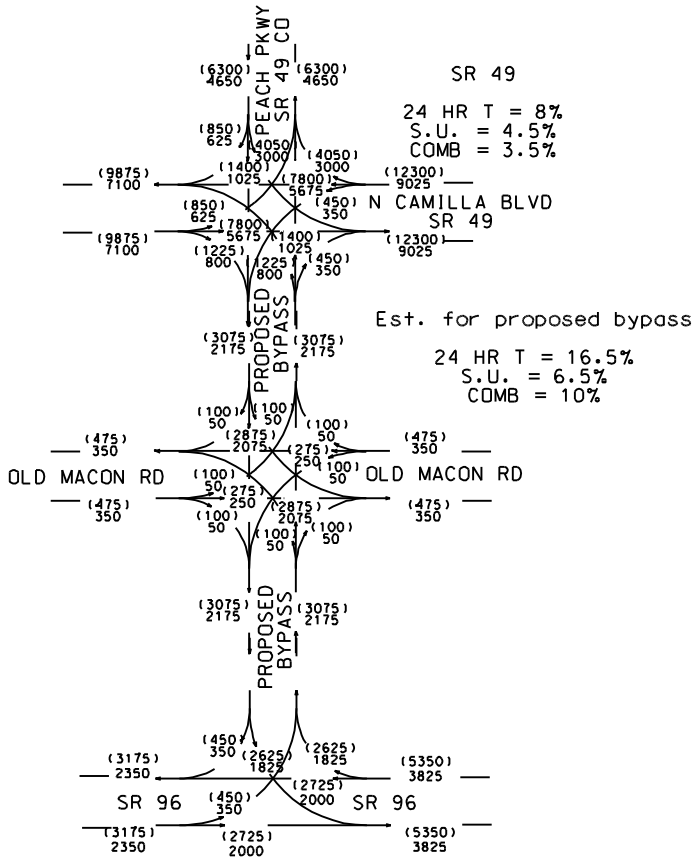
SR 49 BYPASS FROM
SR 49 CONN TO SR 96

2035 BUILD DHV
PM = (000)
AM = 000

RFN
12/2008

SHEET 1 OF 1

GEORGIA DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENT/LOCATION



PEACH COUNTY

N

CSSTP-0006-00(963)
P.I. # 0006963
PEACH COUNTY

SR 49 BYPASS

2015/2035 BUILD ADT

RFN
7/2009

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DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE

FILE: Peach County
State Route 49 Connector at State Route 49
State Route 96 at State Route 49 Connector

OFFICE: District 3 Traffic Operations
Thomaston, Georgia
DATE: November 2, 2010

FROM: Mike England, District Traffic Engineer

TO: Tony Jones, Location Engineer, Office of Design Policy and Support

SUBJECT: Project CSSTP-0006-00(963), P.I. No. 0006963, Peach County

I have reviewed the Highway Capacity Analyses for the project intersections and the future 2035 volumes projected for these locations. Based on the analysis the intersection of State Route 49 at the State Route 49 Extension proposed as a signalized intersection, the 2035 levels of service is projected to be LOS B. For the projected volumes, this will be an acceptable operating level for the area.

The intersection of State Route 49 Connector at State route 96 proposed as a side street stop controlled intersection, your analysis notes acceptable operating levels of service for the future traffic volume conditions.

We concur with your analysis of these two intersections using the respective forms of traffic control. We do recommend your analysis include evaluation of these locations for alternative forms of traffic control including multi-lane roundabout operations with comparison of operating efficiencies for both signal and roundabout traffic control. We recommend cost comparisons of both forms of traffic control to determine the most cost efficient improvement.

If you have any questions, please contact our Thomaston Office.

ME:
cc: Bill Rountree

HCS+: Signalized Intersections Release 5.21

Analyst: Melanie Deal
Agency: GDOT
Date: 11/2/2010
Period: 2035 Build DHV
Project ID: shared through right
E/W St: Peach Pkwy/SR 49

Inter.: SR 49 Conn. & Peach Pkwy/SR 49
Area Type: All other areas
Jurisd: District 3
Year : 2035

N/S St: SR 49 Conn.

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	2	1	1	2	1	1	1	1	1	1	1
LGConfig	L	T	R	L	T	R	L	T	R	L	T	R
Volume	145	880	50	75	905	300	70	185	40	240	135	100
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			0			0			0			0

Duration 1.00 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A		
Thru	A				Thru	A		
Right	A				Right	A		
Peds					Peds			
WB Left	A				SB Left	A		
Thru	A				Thru	A		
Right	A				Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	12.0				10.0			
Yellow	4.0				4.0			
All Red	2.0				2.0			

Cycle Length: 34.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c	Ratios g/C	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound								
L	212	546	0.72	0.35	21.7	C		
T	1101	3119	0.84	0.35	16.5	B	16.8	B
R	491	1392	0.11	0.35	7.5	A		
Westbound								
L	212	546	0.37	0.35	9.3	A		
T	1101	3119	0.87	0.35	18.3	B	16.3	B
R	491	1392	0.64	0.35	12.1	B		
Northbound								
L	321	1092	0.23	0.29	9.5	A		
T	482	1638	0.40	0.29	10.2	B	9.8	A
R	409	1392	0.10	0.29	8.8	A		
Southbound								
L	306	1040	0.83	0.29	30.5	C		
T	482	1638	0.29	0.29	9.6	A	20.2	C
R	409	1392	0.26	0.29	9.5	A		

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

Phone: Fax:
E-Mail:

OPERATIONAL ANALYSIS

Analyst: Melanie Deal
Agency/Co.: GDOT
Date Performed: 11/2/2010
Analysis Time Period: 2035 Build DHV
Intersection: SR 49 Conn. & Peach Pkwy/SR 49
Area Type: All other areas
Jurisdiction: District 3
Analysis Year: 2035
Project ID: shared through right
E/W St: Peach Pkwy/SR 49 N/S St: SR 49 Conn.

VOLUME DATA

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	145	880	50	75	905	300	70	185	40	240	135	100
% Heavy Veh	16	16	16	16	16	16	16	16	16	16	16	16
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PK 15 Vol	38	232	13	20	238	79	18	49	11	63	36	26
Hi Ln Vol												
% Grade		0			0			0			0	
Ideal Sat	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
ParkExist												
NumPark												
No. Lanes	1	2	1	1	2	1	1	1	1	1	1	1
LGConfig	L	T	R	L	T	R	L	T	R	L	T	R
Lane Width	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			0			0			0			0
Adj Flow	153	926	53	79	953	316	74	195	42	253	142	105
%InSharedLn												
Prop LTs	1.000	0.000		1.000	0.000		1.000	0.000		1.000	0.000	
Prop RTs		0.000	1.000		0.000	1.000		0.000	1.000		0.000	1.000
Peds Bikes	0			0			0			0		
Buses	0	0	0	0	0	0	0	0	0	0	0	0
%InProtPhase												

Duration 1.00 Area Type: All other areas

OPERATING PARAMETERS

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Init Unmet	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Arriv. Type	3	3	3	3	3	3	3	3	3	3	3	3
Unit Ext.	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
I Factor		1.000			1.000			1.000			1.000	
Lost Time	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ext of g	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Ped Min g		3.2			3.2			3.2			3.2	

PHASE DATA

Phase Combination		1	2	3	4	5	6	7	8
EB	Left	A				NB Left	A		
	Thru	A				Thru	A		
	Right	A				Right	A		
	Peds					Peds			
WB	Left	A				SB Left	A		
	Thru	A				Thru	A		
	Right	A				Right	A		
	Peds					Peds			
NB	Right					EB Right			
SB	Right					WB Right			
Green		12.0				10.0			
Yellow		4.0				4.0			
All Red		2.0				2.0			

Cycle Length: 34.0 secs

VOLUME ADJUSTMENT AND SATURATION FLOW WORKSHEET

Volume Adjustment

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume, V	145	880	50	75	905	300	70	185	40	240	135	100
PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj flow	153	926	53	79	953	316	74	195	42	253	142	105
No. Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Lane group	L	T	R	L	T	R	L	T	R	L	T	R
Adj flow	153	926	53	79	953	316	74	195	42	253	142	105
Prop LTs	1.000	0.000		1.000	0.000		1.000	0.000		1.000	0.000	
Prop RTs		0.000	1.000		0.000	1.000		0.000	1.000		0.000	1.000

Saturation Flow Rate (see Exhibit 16-7 to determine the adjustment factors)

	Eastbound			Westbound			Northbound			Southbound		
LG	L	T	R	L	T	R	L	T	R	L	T	R
So	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lanes	1	2	1	1	2	1	1	1	1	1	1	1
fW	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
fHV	0.862	0.862	0.862	0.862	0.862	0.862	0.862	0.862	0.862	0.862	0.862	0.862
fG	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
fP	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
fBB	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
fA	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
fLU	1.000	0.952	1.000	1.000	0.952	1.000	1.000	1.000	1.000	1.000	1.000	1.000
fRT		1.000	0.850		1.000	0.850		1.000	0.850		1.000	0.850
fLT	0.333	1.000		0.333	1.000		0.666	1.000		0.635	1.000	
Sec.												
fLpb	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
fRpb		1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000
S	546	3119	1392	546	3119	1392	1092	1638	1392	1040	1638	1392
Sec.												

CAPACITY AND LOS WORKSHEET

Capacity Analysis and Lane Group Capacity

Appr/ Mvmt	Lane Group	Adj Flow Rate (v)	Adj Sat Flow Rate (s)	Flow Ratio (v/s)	Green Ratio (g/C)	--Lane Group-- Capacity (c)	v/c Ratio
Eastbound							
Prot							
Perm							
Left	L	153	546	0.28	0.35	212	0.72
Prot							
Perm							
Thru	T	926	3119	0.30	0.35	1101	0.84
Right	R	53	1392	0.04	0.35	491	0.11
Westbound							
Prot							
Perm							
Left	L	79	546	0.14	0.35	212	0.37
Prot							
Perm							
Thru	T	953	3119	# 0.31	0.35	1101	0.87
Right	R	316	1392	0.23	0.35	491	0.64
Northbound							
Prot							
Perm							
Left	L	74	1092	0.07	0.29	321	0.23
Prot							
Perm							
Thru	T	195	1638	0.12	0.29	482	0.40
Right	R	42	1392	0.03	0.29	409	0.10
Southbound							
Prot							
Perm							
Left	L	253	1040	# 0.24	0.29	306	0.83
Prot							
Perm							
Thru	T	142	1638	0.09	0.29	482	0.29
Right	R	105	1392	0.08	0.29	409	0.26

Sum of flow ratios for critical lane groups, Yc = Sum (v/s) = 0.55
Total lost time per cycle, L = 12.00 sec
Critical flow rate to capacity ratio, Xc = (Yc)(C)/(C-L) = 0.85

Control Delay and LOS Determination

Appr/ Lane Grp	Ratios v/c	Ratios g/C	Unf Del d1	Prog Adj Fact	Lane Grp Cap	Incremental Factor k	Incremental Del d2	Res Del d3	Lane Group Delay	Lane Group LOS	Approach Delay	Approach LOS
Eastbound												
L	0.72	0.35	9.6	1.000	212	0.28	12.2	0.0	21.7	C		
T	0.84	0.35	10.1	1.000	1101	0.38	6.4	0.0	16.5	B	16.8	B
R	0.11	0.35	7.4	1.000	491	0.11	0.1	0.0	7.5	A		
Westbound												
L	0.37	0.35	8.2	1.000	212	0.11	1.1	0.0	9.3	A		
T	0.87	0.35	10.2	1.000	1101	0.40	8.1	0.0	18.3	B	16.3	B
R	0.64	0.35	9.2	1.000	491	0.22	2.9	0.0	12.1	B		
Northbound												
L	0.23	0.29	9.1	1.000	321	0.11	0.4	0.0	9.5	A		
T	0.40	0.29	9.6	1.000	482	0.11	0.6	0.0	10.2	B	9.8	A
R	0.10	0.29	8.7	1.000	409	0.11	0.1	0.0	8.8	A		
Southbound												
L	0.83	0.29	11.2	1.000	306	0.36	19.3	0.0	30.5	C		
T	0.29	0.29	9.3	1.000	482	0.11	0.3	0.0	9.6	A	20.2	C

R	0.26	0.29	9.2	1.000	409	0.11	0.3	0.0	9.5	A

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

SUPPLEMENTAL PERMITTED LT WORKSHEET
for exclusive lefts

Input

	EB	WB	NB	SB
Opposed by Single(S) or Multiple(M) lane approach	M	M	M	M
Cycle length, C 34.0 sec				
Total actual green time for LT lane group, G (s)	12.0	12.0	10.0	10.0
Effective permitted green time for LT lane group, g(s)	12.0	12.0	10.0	10.0
Opposing effective green time, go (s)	12.0	12.0	10.0	10.0
Number of lanes in LT lane group, N	1	1	1	1
Number of lanes in opposing approach, No	2	2	1	1
Adjusted LT flow rate, VLT (veh/h)	153	79	74	253
Proportion of LT in LT lane group, PLT	1.000	1.000	1.000	1.000
Proportion of LT in opposing flow, PLTo	0.00	0.00	0.00	0.00
Adjusted opposing flow rate, Vo (veh/h)	953	926	142	195
Lost time for LT lane group, tL	6.00	6.00	6.00	6.00
Computation				
LT volume per cycle, LTC=VLTC/3600	1.45	0.75	0.70	2.39
Opposing lane util. factor, fLUo	0.952	0.952	1.000	1.000
Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc)	4.73	4.59	1.34	1.84
gf=G[exp(- a * (LTC ** b))]-tl, gf<=g	0.0	0.0	0.0	0.0
Opposing platoon ratio, Rpo (refer Exhibit 16-11)	1.00	1.00	1.00	1.00
Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0]	0.65	0.65	0.71	0.71
gq, (see Exhibit C16-4,5,6,7,8)	2.47	2.14	0.00	0.00
gu=g-gq if gq>=gf, or = g-gf if gq<gf	9.53	9.86	10.00	10.00
n=Max(gq-gf)/2,0)	1.24	1.07	0.00	0.00
PTHo=1-PLTo	1.00	1.00	1.00	1.00
PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)]	1.00	1.00	1.00	1.00
EL1 (refer to Exhibit C16-3)	3.32	3.24	1.50	1.57
EL2=Max((1-Ptho**n)/Plto, 1.0)				
fmin=2(1+PL)/g or fmin=2(1+Pl)/g	0.33	0.33	0.40	0.40
gdiff=max(gq-gf,0)	0.00	0.00	0.00	0.00
fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00)	0.33	0.33	0.67	0.64
flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00)				
or flt=[fm+0.91(N-1)]/N**				
Left-turn adjustment, fLT	0.333	0.333	0.666	0.635

For special case of single-lane approach opposed by multilane approach, see text.
* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto left-turn lane and redo calculations.
** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.
For special case of multilane approach opposed by single-lane approach or when gf>gq, see text.

SUPPLEMENTAL PERMITTED LT WORKSHEET
for shared lefts

Input

	EB	WB	NB	SB
Opposed by Single(S) or Multiple(M) lane approach				
Cycle length, C 34.0 sec				
Total actual green time for LT lane group, G (s)				
Effective permitted green time for LT lane group, g(s)				
Opposing effective green time, go (s)				
Number of lanes in LT lane group, N				

Number of lanes in opposing approach, No
Adjusted LT flow rate, VLT (veh/h)
Proportion of LT in LT lane group, PLT 0.000 0.000 0.000 0.000
Proportion of LT in opposing flow, PLTo
Adjusted opposing flow rate, Vo (veh/h)
Lost time for LT lane group, tL
Computation
LT volume per cycle, LTC=VLTC/3600
Opposing lane util. factor, fLUo 0.952 0.952 1.000 1.000
Opposing flow, Volc=VoC/[3600(No)fLUo] (veh/ln/cyc)
gf=G[exp(- a * (LTC ** b))]-tl, gf<=g
Opposing platoon ratio, Rpo (refer Exhibit 16-11)
Opposing Queue Ratio, qro=Max[1-Rpo(go/C),0]
gq, (see Exhibit C16-4,5,6,7,8)
gu=g-gq if gq>=gf, or = g-gf if gq<gf
n=Max(gq-gf)/2,0)
PTHo=1-PLTo
PL*=PLT[1+(N-1)g/(gf+gu/EL1+4.24)]
EL1 (refer to Exhibit C16-3)
EL2=Max((1-Ptho**n)/Plto, 1.0)
fmin=2(1+PL)/g or fmin=2(1+Pl)/g
gdiff=max(gq-gf,0)
fm=[gf/g]+[gu/g]/[1+PL(EL1-1)], (min=fmin;max=1.00)
flt=fm=[gf/g]+[gu/g]/[1+PL(EL1-1)]+[gdiff/g]/[1+PL(EL2-1)],(fmin<=fm<=1.00)
or flt=[fm+0.91(N-1)]/N**
Left-turn adjustment, fLT

For special case of single-lane approach opposed by multilane approach,
see text.
* If Pl>=1 for shared left-turn lanes with N>1, then assume de-facto
left-turn lane and redo calculations.
** For permitted left-turns with multiple exclusive left-turn lanes, flt=fm.
For special case of multilane approach opposed by single-lane approach
or when gf>gq, see text.

_____SUPPLEMENTAL PEDESTRIAN-BICYCLE EFFECTS WORKSHEET_____
Permitted Left Turns

	EB	WB	NB	SB
Effective pedestrian green time, gp (s)				
Conflicting pedestrian volume, Vped (p/h)				
Pedestrian flow rate, Vpedg (p/h)				
OCCpedg				
Opposing queue clearing green, gq (s)				
Eff. ped. green consumed by opp. veh. queue, gq/gp				
OCCpedu				
Opposing flow rate, Vo (veh/h)				
OCCr				
Number of cross-street receiving lanes, Nrec				
Number of turning lanes, Nturn				
ApbT				
Proportion of left turns, PLT				
Proportion of left turns using protected phase, PLTA				
Left-turn adjustment, fLpb				
Permitted Right Turns				
Effective pedestrian green time, gp (s)				
Conflicting pedestrian volume, Vped (p/h)				
Conflicting bicycle volume, Vbic (bicycles/h)				
Vpedg				
OCCpedg				
Effective green, g (s)				
Vbicg				

OCCbicg
OCCr
Number of cross-street receiving lanes, Nrec
Number of turning lanes, Nturn
ApbT
Proportion right-turns, PRT
Proportion right-turns using protected phase, PRTA
Right turn adjustment, fRpb

SUPPLEMENTAL UNIFORM DELAY WORKSHEET

			EBLT	WBLT	NBLT	SBLT
Cycle length, C	34.0	sec				
Adj. LT vol from Vol Adjustment Worksheet, v						
v/c ratio from Capacity Worksheet, X						
Protected phase effective green interval, g (s)						
Opposing queue effective green interval, gq						
Unopposed green interval, gu						
Red time r=(C-g-gq-gu)						
Arrival rate, qa=v/(3600(max[X,1.0]))						
Protected ph. departure rate, Sp=s/3600						
Permitted ph. departure rate, Ss=s(gq+gu)/(gu*3600)						
XPerm						
XProt						
Case						
Queue at beginning of green arrow, Qa						
Queue at beginning of unsaturated green, Qu						
Residual queue, Qr						
Uniform Delay, d1						

DELAY/LOS WORKSHEET WITH INITIAL QUEUE

Appr/ Lane Group	Initial Unmet Demand Q veh	Dur. Unmet Demand t hrs.	Uniform Delay Unadj. ds	Uniform Delay Adj. d1 sec	Initial Queue Param. u	Final Unmet Demand Q veh	Initial Queue Delay d3 sec	Lane Group Delay d sec
Eastbound								
L	0.0	0.00	11.0	9.6	0.00	0.0	0.0	21.7
T	0.0	0.00	11.0	10.1	0.00	0.0	0.0	16.5
R	0.0	0.00	11.0	7.4	0.00	0.0	0.0	7.5
Westbound								
L	0.0	0.00	11.0	8.2	0.00	0.0	0.0	9.3
T	0.0	0.00	11.0	10.2	0.00	0.0	0.0	18.3
R	0.0	0.00	11.0	9.2	0.00	0.0	0.0	12.1
Northbound								
L	0.0	0.00	12.0	9.1	0.00	0.0	0.0	9.5
T	0.0	0.00	12.0	9.6	0.00	0.0	0.0	10.2
R	0.0	0.00	12.0	8.7	0.00	0.0	0.0	8.8
Southbound								
L	0.0	0.00	12.0	11.2	0.00	0.0	0.0	30.5
T	0.0	0.00	12.0	9.3	0.00	0.0	0.0	9.6
R	0.0	0.00	12.0	9.2	0.00	0.0	0.0	9.5

Intersection Delay 16.4 sec/veh Intersection LOS B

BACK OF QUEUE WORKSHEET

	Eastbound			Westbound			Northbound			Southbound		
LaneGroup	L	T	R	L	T	R	L	T	R	L	T	R
Init Queue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Flow Rate	153	486	53	79	500	316	74	195	42	253	142	105
So	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
No.Lanes	1	2	1	1	2	1	1	1	1	1	1	1
SL	546	1638	1392	546	1638	1392	1092	1638	1392	1040	1638	1392
LnCapacity	212	578	491	212	578	491	321	482	409	306	482	409
Flow Ratio	0.3	0.3	0.0	0.1	0.3	0.2	0.1	0.1	0.0	0.2	0.1	0.1
v/c Ratio	0.72	0.84	0.11	0.37	0.87	0.64	0.23	0.40	0.10	0.83	0.29	0.26
Grn Ratio	0.35	0.35	0.35	0.35	0.35	0.35	0.29	0.29	0.29	0.29	0.29	0.29
I Factor		1.000			1.000			1.000			1.000	
AT or PVG	3	3	3	3	3	3	3	3	3	3	3	3
Pltn Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF2	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Q1	1.3	4.2	0.3	0.6	4.4	2.5	0.5	1.5	0.3	2.2	1.0	0.8
kB	0.1	0.3	0.3	0.1	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Q2	0.4	1.4	0.0	0.1	1.7	0.5	0.1	0.2	0.0	0.9	0.1	0.1
Q Average	1.6	5.6	0.4	0.6	6.1	2.9	0.6	1.6	0.3	3.1	1.1	0.8
Q Spacing	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Q Storage	0	0	0	0	0	0	0	0	0	0	0	0
Q S Ratio												
70th Percentile Output:												
fB%	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
BOQ	1.9	6.7	0.4	0.8	7.2	3.5	0.7	2.0	0.4	3.7	1.4	1.0
QSRatio												
85th Percentile Output:												
fB%	1.6	1.5	1.6	1.6	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6
BOQ	2.6	8.7	0.6	1.0	9.4	4.6	0.9	2.6	0.5	4.9	1.8	1.3
QSRatio												
90th Percentile Output:												
fB%	1.8	1.7	1.8	1.8	1.7	1.7	1.8	1.8	1.8	1.7	1.8	1.8
BOQ	2.9	9.6	0.7	1.1	10.3	5.1	1.1	2.9	0.6	5.4	2.0	1.5
QSRatio												
95th Percentile Output:												
fB%	2.0	1.9	2.1	2.1	1.9	2.0	2.1	2.0	2.1	2.0	2.1	2.1
BOQ	3.3	10.9	0.8	1.3	11.8	5.9	1.2	3.4	0.7	6.2	2.4	1.7
QSRatio												
98th Percentile Output:												
fB%	2.6	2.3	2.7	2.7	2.3	2.5	2.7	2.6	2.7	2.5	2.6	2.6
BOQ	4.2	13.2	1.0	1.7	14.2	7.4	1.6	4.2	0.8	7.7	3.0	2.2
QSRatio												

ERROR MESSAGES

No errors to report.

HCS+: Unsignalized Intersections Release 5.21

TWO-WAY STOP CONTROL SUMMARY

Analyst: Melanie Deal
Agency/Co.: GDOT
Date Performed: 11/2/2010
Analysis Time Period: AM Peak
Intersection: Proposed Bypass at SR 96
Jurisdiction: District 2
Units: U. S. Customary
Analysis Year: 2035
Project ID: 0006963 - PESTP-0006-00(963)
East/West Street: SR 96
North/South Street: SR 49 Conn. Ext (Bypass)
Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	70	0	65			
Peak-Hour Factor, PHF	1.00	1.00	1.00			
Hourly Flow Rate, HFR	70	0	65			
Percent Heavy Vehicles	16	--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes	0	0	0			
Configuration		LTRLR				
Upstream Signal?		No			No	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	245	225			200	60
Peak Hour Factor, PHF	1.00	1.00			1.00	1.00
Hourly Flow Rate, HFR	245	225			200	60
Percent Heavy Vehicles	16	16			16	16
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			/			/
Lanes	1	1			1	1
Configuration	L	T			T	R

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config	LTR		L	T			T	R
v (vph)	70		245	225			200	60
C(m) (vph)	1536		431	665			637	1045
v/c	0.05		0.57	0.34			0.31	0.06
95% queue length	0.14		3.44	1.49			1.34	0.18
Control Delay	7.5		23.8	13.2			13.2	8.7
LOS	A		C	B			B	A
Approach Delay				18.7			12.2	
Approach LOS				C			B	

HCS+: Unsignalized Intersections Release 5.21

Phone: Fax:
E-Mail:

TWO-WAY STOP CONTROL(TWSC) ANALYSIS

Analyst: Melanie Deal
Agency/Co.: GDOT
Date Performed: 11/2/2010
Analysis Time Period: AM Peak
Intersection: Proposed Bypass at SR 96
Jurisdiction: District 2
Units: U. S. Customary
Analysis Year: 2035
Project ID: 0006963 - PESTP-0006-00(963)
East/West Street: SR 96
North/South Street: SR 49 Conn. Ext (Bypass)
Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street Movements	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	70	0	65			
Peak-Hour Factor, PHF	1.00	1.00	1.00			
Peak-15 Minute Volume	18	0	16			
Hourly Flow Rate, HFR	70	0	65			
Percent Heavy Vehicles	16	--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes	0	0	0			
Configuration	LTRLR					
Upstream Signal?		No			No	

Minor Street Movements	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	245	225			200	60
Peak Hour Factor, PHF	1.00	1.00			1.00	1.00
Peak-15 Minute Volume	61	56			50	15
Hourly Flow Rate, HFR	245	225			200	60
Percent Heavy Vehicles	16	16			16	16
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
RT Channelized?						No
Lanes	1	1			1	1
Configuration	L	T			T	R

Pedestrian Volumes and Adjustments

Movements	13	14	15	16
Flow (ped/hr)	0	0	0	0

Lane Width (ft)	12.0	12.0	12.0	12.0
Walking Speed (ft/sec)	4.0	4.0	4.0	4.0
Percent Blockage	0	0	0	0

Upstream Signal Data

		Prog. Flow vph	Sat Flow vph	Arrival Type	Green Time sec	Cycle Length sec	Prog. Speed mph	Distance to Signal feet
S2	Left-Turn							
	Through							
S5	Left-Turn							
	Through							

Worksheet 3-Data for Computing Effect of Delay to Major Street Vehicles

	Movement 2	Movement 5
Shared ln volume, major th vehicles:	0	
Shared ln volume, major rt vehicles:	0	
Sat flow rate, major th vehicles:	1700	
Sat flow rate, major rt vehicles:	1700	
Number of major street through lanes:	0	

Worksheet 4-Critical Gap and Follow-up Time Calculation

Critical Gap Calculation

Movement		1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
t(c,base)		4.1		7.1	6.5			6.5	6.2
t(c,hv)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
P(hv)		16		16	16			16	16
t(c,g)				0.20	0.20	0.10	0.20	0.20	0.10
Grade/100				0.00	0.00	0.00	0.00	0.00	0.00
t(3,lt)		0.00		0.00	0.00			0.00	0.00
t(c,T):	1-stage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2-stage	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
t(c)	1-stage	4.3		7.3	6.7			6.7	6.4
	2-stage								

Follow-Up Time Calculations

Movement	1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
t(f,base)	2.20		3.50	4.00			4.00	3.30
t(f,HV)	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
P(HV)	16		16	16			16	16
t(f)	2.3		3.6	4.1			4.1	3.4

Worksheet 5-Effect of Upstream Signals

Computation 1-Queue Clearance Time at Upstream Signal

	Movement 2		Movement 5	
	V(t)	V(l,prot)	V(t)	V(l,prot)
V prog				

Total Saturation Flow Rate, s (vph)	
Arrival Type	
Effective Green, g (sec)	
Cycle Length, C (sec)	
Rp (from Exhibit 16-11)	
Proportion vehicles arriving on green P	
g(q1)	
g(q2)	
g(q)	

Computation 2-Proportion of TWSC Intersection Time blocked	Movement 2		Movement 5	
	V(t)	V(l,prot)	V(t)	V(l,prot)
alpha				
beta				
Travel time, t(a) (sec)				
Smoothing Factor, F				
Proportion of conflicting flow, f				
Max platooned flow, V(c,max)				
Min platooned flow, V(c,min)				
Duration of blocked period, t(p)				
Proportion time blocked, p	0.000		0.000	

Computation 3-Platoon Event Periods	Result
p(2)	0.000
p(5)	0.000
p(dom)	
p(subo)	
Constrained or unconstrained?	

Proportion unblocked for minor movements, p(x)	(1) Single-stage Process	(2) Two-Stage Process Stage I	(3) Two-Stage Process Stage II
p(1)			
p(4)			
p(7)			
p(8)			
p(9)			
p(10)			
p(11)			
p(12)			

Computation 4 and 5

Single-Stage Process

Movement	1 L	4 L	7 L	8 T	9 R	10 L	11 T	12 R
V c,x	0		302	172			205	0
s								
Px								
V c,u,x								
C r,x								
C plat,x								

Two-Stage Process

7	8	10	11

	Stage1	Stage2	Stage1	Stage2	Stage1	Stage2	Stage1	Stage2
V(c,x)								
s		0		0				0
P(x)								
V(c,u,x)								
C(r,x)								
C(plat,x)								

Worksheet 6-Impedance and Capacity Equations

Step 1: RT from Minor St.	9	12
Conflicting Flows		0
Potential Capacity		1045
Pedestrian Impedance Factor	1.00	1.00
Movement Capacity		1045
Probability of Queue free St.	1.00	0.94
Step 2: LT from Major St.	4	1
Conflicting Flows		0
Potential Capacity		1536
Pedestrian Impedance Factor	1.00	1.00
Movement Capacity		1536
Probability of Queue free St.	1.00	0.95
Maj L-Shared Prob Q free St.		0.95
Step 3: TH from Minor St.	8	11
Conflicting Flows	172	205
Potential Capacity	697	667
Pedestrian Impedance Factor	1.00	1.00
Cap. Adj. factor due to Impeding mvmnt	0.95	0.95
Movement Capacity	665	637
Probability of Queue free St.	0.66	0.69
Step 4: LT from Minor St.	7	10
Conflicting Flows	302	
Potential Capacity	624	
Pedestrian Impedance Factor	1.00	1.00
Maj. L, Min T Impedance factor	0.65	0.63
Maj. L, Min T Adj. Imp Factor.	0.73	0.71
Cap. Adj. factor due to Impeding mvmnt	0.69	0.71
Movement Capacity	431	

Worksheet 7-Computation of the Effect of Two-stage Gap Acceptance

Step 3: TH from Minor St.	8	11
Part 1 - First Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Probability of Queue free St.		

Part 2 - Second Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 3 - Single Stage		
Conflicting Flows	172	205
Potential Capacity	697	667
Pedestrian Impedance Factor	1.00	1.00
Cap. Adj. factor due to Impeding mvmnt	0.95	0.95
Movement Capacity	665	637
Result for 2 stage process:		
a		
y		
C t	665	637
Probability of Queue free St.	0.66	0.69
Step 4: LT from Minor St.	7	10
Part 1 - First Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 2 - Second Stage		
Conflicting Flows		
Potential Capacity		
Pedestrian Impedance Factor		
Cap. Adj. factor due to Impeding mvmnt		
Movement Capacity		
Part 3 - Single Stage		
Conflicting Flows	302	
Potential Capacity	624	
Pedestrian Impedance Factor	1.00	1.00
Maj. L, Min T Impedance factor	0.65	0.63
Maj. L, Min T Adj. Imp Factor.	0.73	0.71
Cap. Adj. factor due to Impeding mvmnt	0.69	0.71
Movement Capacity	431	
Results for Two-stage process:		
a		
y		
C t	431	

Worksheet 8-Shared Lane Calculations

Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (vph)	245	225			200	60
Movement Capacity (vph)	431	665			637	1045
Shared Lane Capacity (vph)						

Worksheet 9-Computation of Effect of Flared Minor Street Approaches

Movement	7	8	9	10	11	12
	L	T	R	L	T	R
C sep	431	665			637	1045
Volume	245	225			200	60
Delay						
Q sep						
Q sep +1						
round (Qsep +1)						
n max						
C sh						
SUM C sep						
n						
C act						

Worksheet 10-Delay, Queue Length, and Level of Service

Movement	1	4	7	8	9	10	11	12
Lane Config	LTR		L	T			T	R
v (vph)	70		245	225			200	60
C(m) (vph)	1536		431	665			637	1045
v/c	0.05		0.57	0.34			0.31	0.06
95% queue length	0.14		3.44	1.49			1.34	0.18
Control Delay	7.5		23.8	13.2			13.2	8.7
LOS	A		C	B			B	A
Approach Delay				18.7			12.2	
Approach LOS				C			B	

Worksheet 11-Shared Major LT Impedance and Delay

	Movement 2	Movement 5
p(oj)	0.95	1.00
v(il), Volume for stream 2 or 5	0	
v(i2), Volume for stream 3 or 6	0	
s(il), Saturation flow rate for stream 2 or 5	1700	
s(i2), Saturation flow rate for stream 3 or 6	1700	
P*(oj)	0.95	
d(M,LT), Delay for stream 1 or 4	7.5	
N, Number of major street through lanes	0	
d(rank,1) Delay for stream 2 or 5		

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: State Route 49 at 49 Connector
Peach County

OFFICE: Traffic Operations
District Three

DATE: September 9, 2010

FROM: Mike England, District Traffic Engineer

TO: Tony Jones, Location Engineer

SUBJECT: Signal Warrant /Roundabout Analysis for Project # CSSTP-0006-00(963)

Attached are traffic signal warrant analysis and roundabout studies for the intersections of SR 49 at SR49 Connector/Bypass and SR 49 Bypass at SR 96 in Peach County. These two intersections are part of the subject construction project. The volumes used for the analyses are projected counts for 2015 provided by the concept report.

The acquisition of additional right of way will be required in order to install either a roundabout or a traffic signal at the SR 49 /49 bypass intersection.

The District Three Traffic Operations Department recommends that a roundabout be the primary consideration for the intersection of SR 49 and SR 49 Connector/Bypass and that the SR 49 Bypass at SR 96 intersection be stop sign controlled.

If you have questions concerning this matter, please contact Chance Baxley at (706) 646-6686.

ME:CB
Attachment

SR 49 at SR 49 Connector

100% Volumes with side street right turn reductions

Signal Warrants - Summary

Major Street Approaches

Northbound: **SR 49 NB**
Number of Lanes: **2**
Approach Speed: **0**
Total Approach Volume: **7,101**

Southbound: **SR 49 SB**
Number of Lanes: **2**
Approach Speed: **0**
Total Approach Volume: **9,026**

Minor Street Approaches

Eastbound: **SR 49 Co EB**
Number of Lanes: **2**

Total Approach Volume: **4,220**

Westbound: **SR 49 CO WB**
Number of Lanes: **2**

Total Approach Volume: **1,825**

Warrant Summary **(Urban values apply.)**

Warrant 1 - Eight Hour Vehicular Volumes ..... **Satisfied**

Warrant 1A - Minimum Vehicular Volume ..... **Satisfied**
Required volumes reached for 11 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic ..... **Satisfied**
Required volumes reached for 8 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants ..... **Satisfied**
Required volumes reached for 12 hours, 8 are needed

Warrant 2 - Four Hour Volumes ..... **Satisfied**
Number of hours (8) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour ..... **Satisfied**

Warrant 3A - Peak Hour Delay ..... **Not Satisfied**
Total approach volumes and delays on minor street do not exceed minimums for any hour.

Warrant 3B - Peak Hour Volumes ..... **Satisfied**
Volumes exceed minimums for at least one hour.

Warrant 4 - Pedestrian Volumes ..... **Not Satisfied**
Required 4 Hr pedestrian volume reached for 0 hour(s) and the single hour volume for 0 hour(s)

Warrant 5 - School Crossing ..... **Not Evaluated**

Warrant 6 - Coordinated Signal System ..... **Not Satisfied**
No adjacent coordinated signals are present

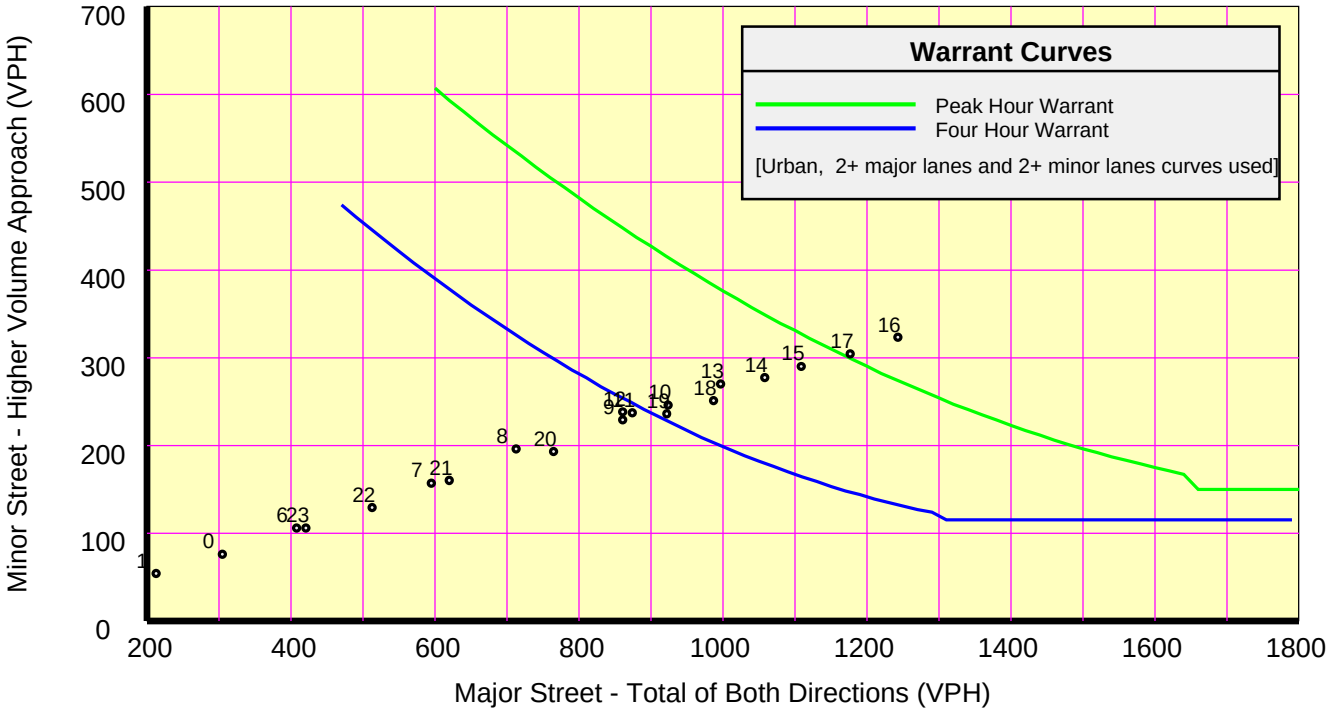
Warrant 7 - Crash Experience ..... **Not Satisfied**
Number of accidents (-1) is less than minimum (5). Volume minimums are met.

Warrant 8 - Roadway Network ..... **Not Evaluated**

SR 49 at SR 49 Connector

100% Volumes with side street right turn reductions

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

Hour	Major	Higher Minor		War-1A			War-1B			War-1A&B		
Begin	Total	Vol	Dir	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00	305	76	EB	600-No	200-No	---	900-No	100-No	---	720-No	160-No	---
01:00	213	54	EB	600-No	200-No	---	900-No	100-No	---	720-No	160-No	---
02:00	145	36	EB	600-No	200-No	---	900-No	100-No	---	720-No	160-No	---
03:00	123	32	EB	600-No	200-No	---	900-No	100-No	---	720-No	160-No	---
04:00	123	32	EB	600-No	200-No	---	900-No	100-No	---	720-No	160-No	---
05:00	170	42	EB	600-No	200-No	---	900-No	100-No	---	720-No	160-No	---
06:00	408	106	EB	600-No	200-No	---	900-No	100-Yes	Minor	720-No	160-No	---
07:00	595	157	EB	600-No	200-No	---	900-No	100-Yes	Minor	720-No	160-No	---
08:00	713	196	EB	600-Yes	200-No	Major	900-No	100-Yes	Minor	720-No	160-Yes	Minor
09:00	861	229	EB	600-Yes	200-Yes	Both	900-No	100-Yes	Minor	720-Yes	160-Yes	Both
10:00	924	246	EB	600-Yes	200-Yes	Both	900-Yes	100-Yes	Both	720-Yes	160-Yes	Both
11:00	874	237	EB	600-Yes	200-Yes	Both	900-No	100-Yes	Minor	720-Yes	160-Yes	Both
12:00	861	238	EB	600-Yes	200-Yes	Both	900-No	100-Yes	Minor	720-Yes	160-Yes	Both
13:00	997	270	EB	600-Yes	200-Yes	Both	900-Yes	100-Yes	Both	720-Yes	160-Yes	Both
14:00	1,058	277	EB	600-Yes	200-Yes	Both	900-Yes	100-Yes	Both	720-Yes	160-Yes	Both
15:00	1,109	290	EB	600-Yes	200-Yes	Both	900-Yes	100-Yes	Both	720-Yes	160-Yes	Both
16:00	1,243	323	EB	600-Yes	200-Yes	Both	900-Yes	100-Yes	Both	720-Yes	160-Yes	Both
17:00	1,177	304	EB	600-Yes	200-Yes	Both	900-Yes	100-Yes	Both	720-Yes	160-Yes	Both
18:00	987	251	EB	600-Yes	200-Yes	Both	900-Yes	100-Yes	Both	720-Yes	160-Yes	Both
19:00	922	236	EB	600-Yes	200-Yes	Both	900-Yes	100-Yes	Both	720-Yes	160-Yes	Both
20:00	765	193	EB	600-Yes	200-No	Major	900-No	100-Yes	Minor	720-Yes	160-Yes	Both
21:00	620	160	EB	600-Yes	200-No	Major	900-No	100-Yes	Minor	720-No	160-Yes	Minor
22:00	513	129	EB	600-No	200-No	---	900-No	100-Yes	Minor	720-No	160-No	---
23:00	421	106	EB	600-No	200-No	---	900-No	100-Yes	Minor	720-No	160-No	---

SR 49 Bypass at SR96 3/30/2010

Signal Warrants - Summary

Major Street Approaches

Eastbound: **SR96 Eastbound**
Number of Lanes: **1**
Approach Speed: **0**
Total Approach Volume: **2,348**

Westbound: **SR96 Westbound**
Number of Lanes: **1**
Approach Speed: **0**
Total Approach Volume: **3,822**

Minor Street Approaches

Northbound:
Number of Lanes: **2**

Total Approach Volume: **0**

Southbound: **SR 49 Bypass**
Number of Lanes: **2**

Total Approach Volume: **1,825**

Warrant Summary **(Urban values apply.)**

Warrant 1 - Eight Hour Vehicular Volumes ..... **Not Satisfied**

Warrant 1A - Minimum Vehicular Volume ..... **Not Satisfied**
Required volumes reached for 0 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic ..... **Not Satisfied**
Required volumes reached for 0 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants ..... **Not Satisfied**
Required volumes reached for 0 hours, 8 are needed

Warrant 2 - Four Hour Volumes ..... **Not Satisfied**
Number of hours (0) volumes exceed minimum < minimum required (4).

Warrant 3 - Peak Hour ..... **Not Satisfied**

Warrant 3A - Peak Hour Delay ..... **Not Satisfied**
Total approach volumes and delays on minor street do not exceed minimums for any hour.

Warrant 3B - Peak Hour Volumes ..... **Not Satisfied**
Volumes do not exceed minimums for any hour.

Warrant 4 - Pedestrian Volumes ..... **Not Satisfied**
Required 4 Hr pedestrian volume reached for 0 hour(s) and the single hour volume for 0 hour(s)

Warrant 5 - School Crossing ..... **Not Evaluated**

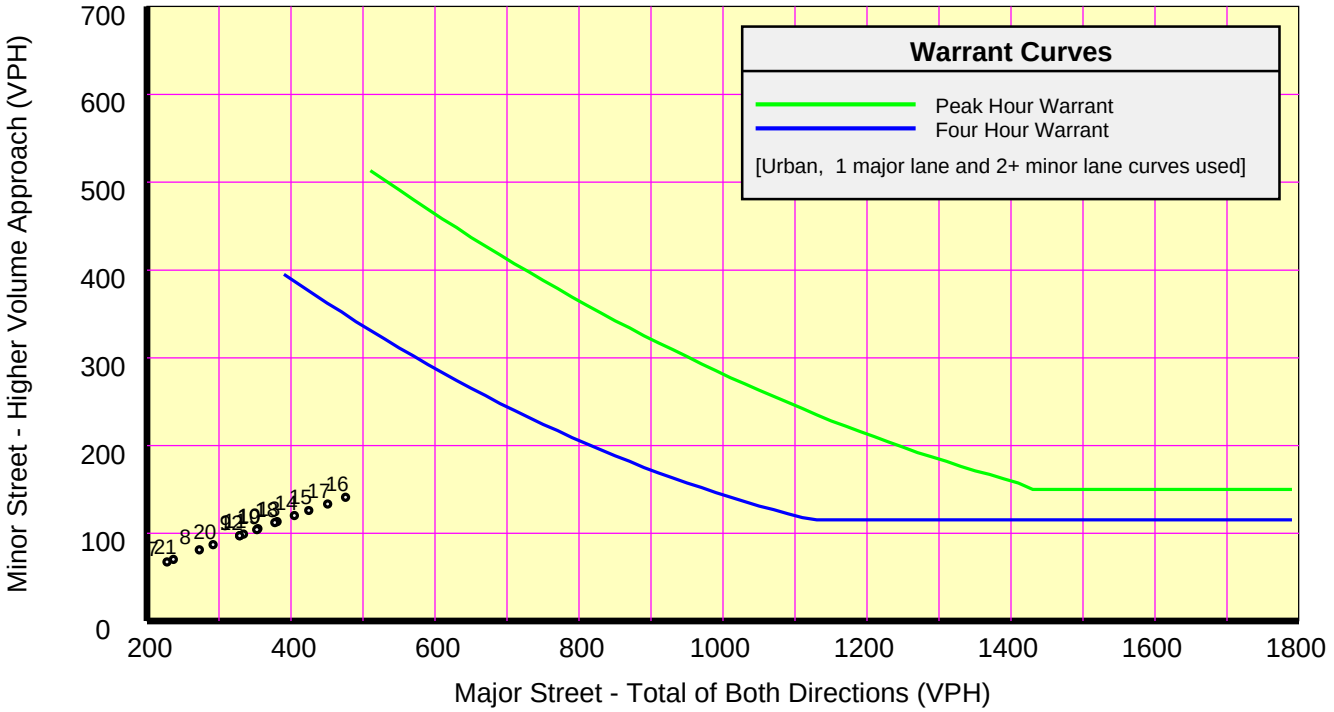
Warrant 6 - Coordinated Signal System ..... **Not Satisfied**
No adjacent coordinated signals are present

Warrant 7 - Crash Experience ..... **Not Satisfied**
Number of accidents (-1) is less than minimum (5). Volume minimums are not met.

Warrant 8 - Roadway Network ..... **Not Evaluated**

SR 49 Bypass at SR96 3/30/2010

Signal Warrants - Summary

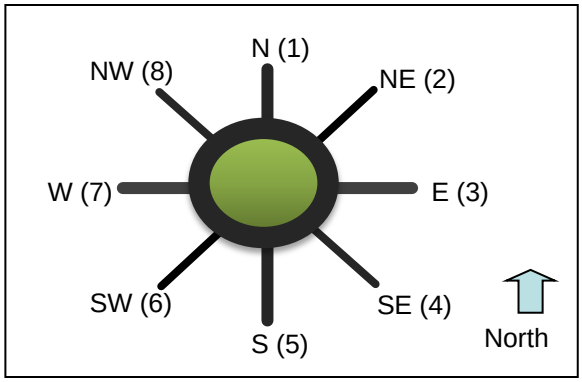


Analysis of 8-Hour Volume Warrants:

Hour	Major	Higher Minor		War-1A			War-1B			War-1A&B		
Begin	Total	Vol	Dir	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00	116	34	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
01:00	81	24	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
02:00	55	16	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
03:00	47	14	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
04:00	47	14	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
05:00	65	19	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
06:00	156	46	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
07:00	228	67	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
08:00	273	81	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
09:00	329	97	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
10:00	354	105	SB	500-No	200-No	---	750-No	100-Yes	Minor	600-No	160-No	---
11:00	334	99	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
12:00	329	97	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
13:00	381	113	SB	500-No	200-No	---	750-No	100-Yes	Minor	600-No	160-No	---
14:00	405	120	SB	500-No	200-No	---	750-No	100-Yes	Minor	600-No	160-No	---
15:00	425	126	SB	500-No	200-No	---	750-No	100-Yes	Minor	600-No	160-No	---
16:00	476	141	SB	500-No	200-No	---	750-No	100-Yes	Minor	600-No	160-No	---
17:00	451	133	SB	500-No	200-No	---	750-No	100-Yes	Minor	600-No	160-No	---
18:00	378	112	SB	500-No	200-No	---	750-No	100-Yes	Minor	600-No	160-No	---
19:00	353	104	SB	500-No	200-No	---	750-No	100-Yes	Minor	600-No	160-No	---
20:00	292	87	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
21:00	237	70	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
22:00	197	58	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---
23:00	161	48	SB	500-No	200-No	---	750-No	100-No	---	600-No	160-No	---

General & Site Information

Analyst:	Chance Baxley
Agency/Company:	GDOT
Date:	9/9/2010
Project Name or PI#:	6963
Year, Peak Hour:	2035/ PM
County/District:	Peach/D3
Intersection:	State Route 49 at State Route 49 Connector



Volumes		Entry Legs (FROM)							
		N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
	N (1), vph						75		
Exit	NE (2), vph								
Legs	E (3), vph	40							
(TO)	SE (4), vph								
	S (5), vph	540	340			50			
	SW (6), vph								
	W (7), vph		240			80	55		
	NW (8), vph								
	Entry Volume, vph	580	580	0	0	130	130	0	0
		S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
	N (1), vph	438	467			300			
	NE (2), vph								
	E (3), vph		70			15	170		
	SE (4), vph								
	S (5), vph						145		
	SW (6), vph								
	W (7), vph	100							
	NW (8), vph								
	Entry Volume, vph	538	537	0	0	315	315	0	0

Critical Lane Volumes	N	NE	E	SE	S	SW	W	NW
N (1), vph	0	0	0	0	438	0	300	0
NE (2), vph	0	0	0	0	0	0	0	0
E (3), vph	40	0	0	0	0	0	15	0
SE (4), vph	0	0	0	0	0	0	0	0
S (5), vph	540	0	50	0	0	0	0	0
SW (6), vph	0	0	0	0	0	0	0	0
W (7), vph	0	0	80	0	100	0	0	0
NW (8), vph	0	0	0	0	0	0	0	0
Entry Volume, vph	580	0	130	0	538	0	315	0
Approach	2	2	2	2	2	2	2	2

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	92%	100%	83%	100%	92%	100%	83%	100%
% S.U./ Bus	5%	0%	7%	0%	5%	0%	7%	0%
% Trucks/ Combin.	3%	0%	10%	0%	3%	0%	10%	0%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	0.948	1.000	0.881	1.000	0.948	1.000	0.881	1.000

Entry/Conflicting Flows	N	NE	E	SE	S	SW	W	NW
Flow to N (1), pcu/h	0	0	93	0	1038	0	370	0
Leg # NE (2), pcu/h	0	0	0	0	0	0	0	0
E (3), pcu/h	46	0	0	0	80	0	228	0
SE (4), pcu/h	0	0	0	0	0	0	0	0
S (5), pcu/h	1009	0	62	0	0	0	179	0
SW (6), pcu/h	0	0	0	0	0	0	0	0
W (7), pcu/h	275	0	167	0	115	0	0	0
NW (8), pcu/h	0	0	0	0	0	0	0	0
Conflicting flow, pcu/h	343	0	1523	0	644	0	1117	0

Results: Approach Measures of Effectiveness

NCHRP-572 Model	N	NE	E	SE	S	SW	W	NW
Crit. Entry Capacity pcu/h	889	NA	389	NA	720	NA	517	NA
Crit. Lane Entry Flow pcu/h	665	0	160	0	617	0	389	0
V/C ratio	**0.75**		**0.41**		**0.86**		**0.75**	
Control Delay, sec/pcu	**15.0**		**15.6**		**27.3**		**25.1**	
LOS	C		C		D		D	
95th % Queue (ft)	**188**		**56**		**266**		**184**	

UK Model**	N	NE	E	SE	S	SW	W	NW
Crit. Entry Capacity pcu/h	2179	NA	1334	NA	1963	NA	1625	NA
Entry Flow pcu/h	1330	0	321	0	1233	0	777	0
V/C ratio	**0.61**		**0.24**		**0.63**		**0.48**	
Control Delay, sec/pcu	**4.2**		**3.6**		**4.9**		**4.2**	
LOS	A		A		A		A	
95th % Queue (ft)	**119**		**27**		**127**		**76**	

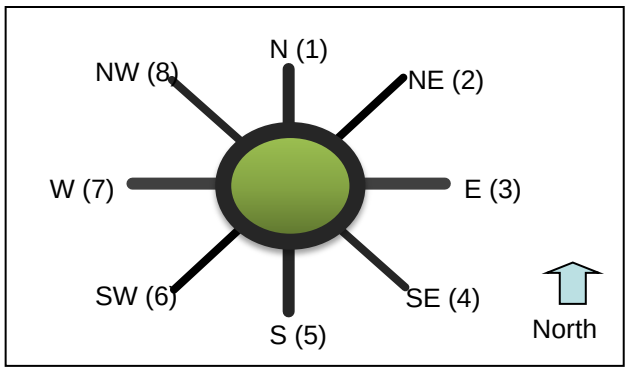
Notes:

Unit Legend:
vph = vehicles per hour
PHF = peak hour factor
F_{HV} = heavy vehicle factor
pcu = passenger car unit

Bypass Lane Merge Point Analysis (if applicable)						
Bypass Characteristics	**Bypass #1**	**Bypass #2**	**Bypass #3**	**Bypass #4**	**Bypass #5**	**Bypass #6**
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Critical Lane Flow (Default) in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
******Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.***						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results (NCHRP-572 Method)						
Entry Capacity at bypass merge point, pcu/hr						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

General & Site Information

Analyst:	Chance Baxley
Agency/Company:	GDOT
Date:	9/9/2010
Project Name or PI#:	0006963
Year, Peak Hour:	2035 PM
County/District:	Peach/D3
Intersection:	SR 49 Conn at SR 96



Volumes

		Entry Legs (FROM)							
		N (1)	NE (2)	E (3)	SE (4)	S (5)	SW (6)	W (7)	NW (8)
Exit Legs (TO)	N (1), vph			200				60	
	NE (2), vph								
	E (3), vph								
	SE (4), vph								
	S (5), vph	225						245	
	SW (6), vph								
	W (7), vph	70		65					
	NW (8), vph								
Output	Total Vehicles	295	0	265	0	0	0	305	0

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	83%	100%	83%	100%	100%	100%	83%	100%
% SU/ Bus	7%	0%	7%	0%	0%	0%	7%	0%
% Trucks/ Combin.	10%	0%	10%	0%	0%	0%	10%	0%
% Bicycle	0%	0%	0%	0%	0%	0%	0%	0%
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{HV}	0.881	1.000	0.881	1.000	1.000	1.000	0.881	1.000

Entry/Conflicting Flows	N	NE	E	SE	S	SW	W	NW
Flow to Leg # N (1), pcu/h	0	0	247	0	0	0	74	0
NE (2), pcu/h	0	0	0	0	0	0	0	0
E (3), pcu/h	0	0	0	0	0	0	0	0
SE (4), pcu/h	0	0	0	0	0	0	0	0
S (5), pcu/h	278	0	0	0	0	0	302	0
SW (6), pcu/h	0	0	0	0	0	0	0	0
W (7), pcu/h	86	0	80	0	0	0	0	0
NW (8), pcu/h	0	0	0	0	0	0	0	0
Entry flow, pcu/h	364	0	327	0	0	0	376	0
Conflicting flow, pcu/h	80	0	74	0	0	0	278	0

Roundabout Type	Standard Single Lane or Urban Compact
Enter type here…	Standard Single Lane

Results: Approach Measures of Effectiveness

NCHRP-572 Model	N	NE	E	SE	S	SW	W	NW
Entry Capacity, pcu/h	1043	NA	1049	NA	NA	NA	856	NA
V/C ratio	**0.35**		**0.31**				**0.44**	
Control Delay, sec/pcu	**5**		**5**				**7**	
LOS	A		A				A	
95th % Queue (ft)	**45**		**38**				**64**	

UK Model**	N	NE	E	SE	S	SW	W	NW
Entry Capacity, pcu/h	1168	NA	1172	NA	NA	NA	1061	NA
V/C ratio	**0.31**		**0.28**				**0.35**	
Control Delay, sec/pcu	**4**		**4**				**5**	
LOS	A		A				A	
95th % Queue (ft)	**38**		**33**				**46**	

Notes:

Unit Legend:
vph = vehicles per hour
PHF = peak hour factor
F_{HV} = heavy vehicle factor
pcu = passenger car unit

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Volumes						
Right Turn Volume removed from Entry Leg						
Volume Characteristics (for entry leg)						
PHF						
F_{HV}						
NOTE: Volume Characteristics for Exit Leg are already taken into account						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Flow						
Bypass Lane Results (NCHRP-572 Model)						
Entry Capacity at bypass mergepoint, pcu/hr						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Executive Summary

Introduction

The United States Department of Transportation (USDOT) awarded the Georgia Department of Transportation (GDOT) a National Corridor Planning and Development (NCPD) Program grant in May 1999. The purpose of the grant was to evaluate the central Georgia portion of the strategic east-west freight corridor, designated as High Priority Corridor Six (HPC 6), and make recommendations to more expediently connect Georgia's Atlantic ports to the west. HPC 6 is one of 44 high priority corridors identified by Congress and one of two located in Georgia. HPC 6 follows I-16, SR 96, and US 80 in Georgia and continues along US 80 through Alabama to Meridian, Mississippi (Figure E.1).

GDOT broadened the study to include a thorough evaluation of transportation, commodity movement, and economic development in a 45-county study area in south central Georgia (Figure E.2). Anchored by Columbus on the west, Savannah/Brunswick on the east, and Macon/Warner Robins in the center, central Georgia's study area encompasses both rural and urban counties strategically located to grow into a stronger and more influential "engine" driving the state's economy south of Atlanta. US 280, recently designated as a GRIP[1] corridor, was specifically studied as another east-west freight movement and economic development route. The findings and recommendations for US 280 are presented in a separate report.

The NCPD Program is a discretionary grant program funded by a single federal funding source. The purpose of the NCPD Program is to provide allocations to states and metropolitan planning organizations (MPOs) for coordinated planning, design, and construction of corridors of national significance that support economic growth and international or interregional trade. Initially envisioned as a competitive discretionary funding source for projects selected by the Federal Highway Administration, the program has evolved to one through which projects are selected by Congressional earmark in the yearly transportation appropriation cycle. NCPD funding is limited and highly competitive throughout the nation.

Freight movement along HPC 6 includes movement of military personnel and ordinance between Fort Benning, Warner Robins Air Force Base, Fort Stewart, Hunter Army Airfield, and the Port of Savannah. The importance of the corridor is magnified by the location of these installations and their transportation needs.

[1] The GRIP program (Governor's Road Improvement Program) was designed to ensure that 98% of all areas in Georgia would be within 20 miles of a four-lane road.

Figure E.1: High Priority Corridor Six

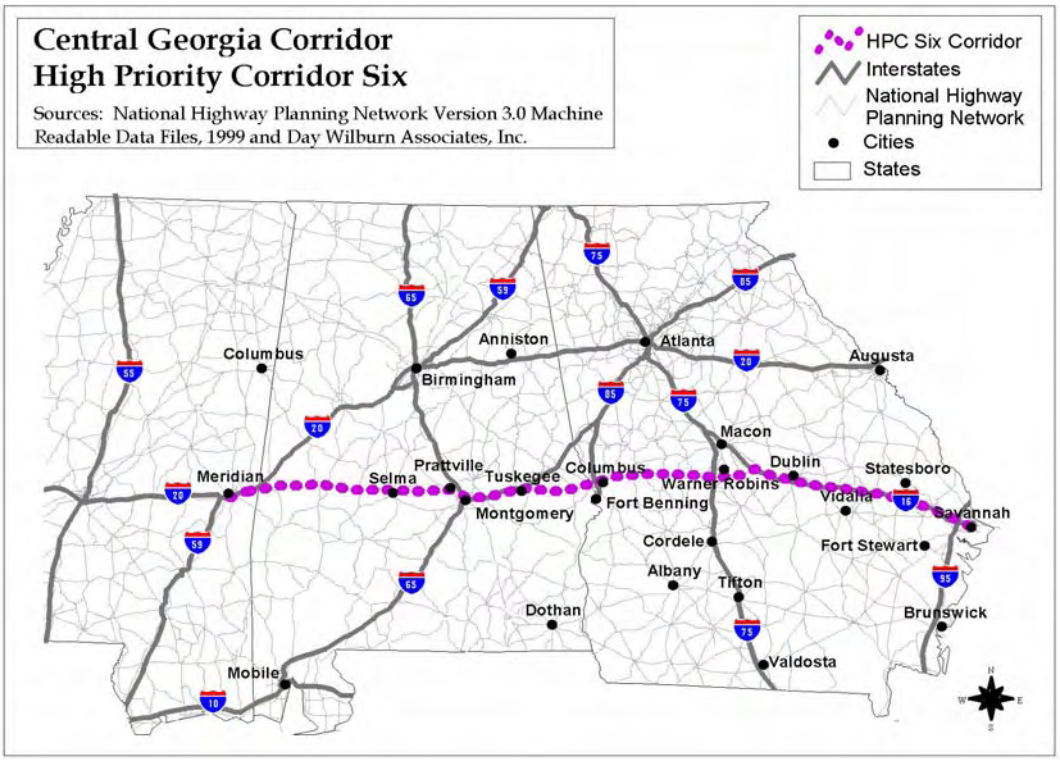
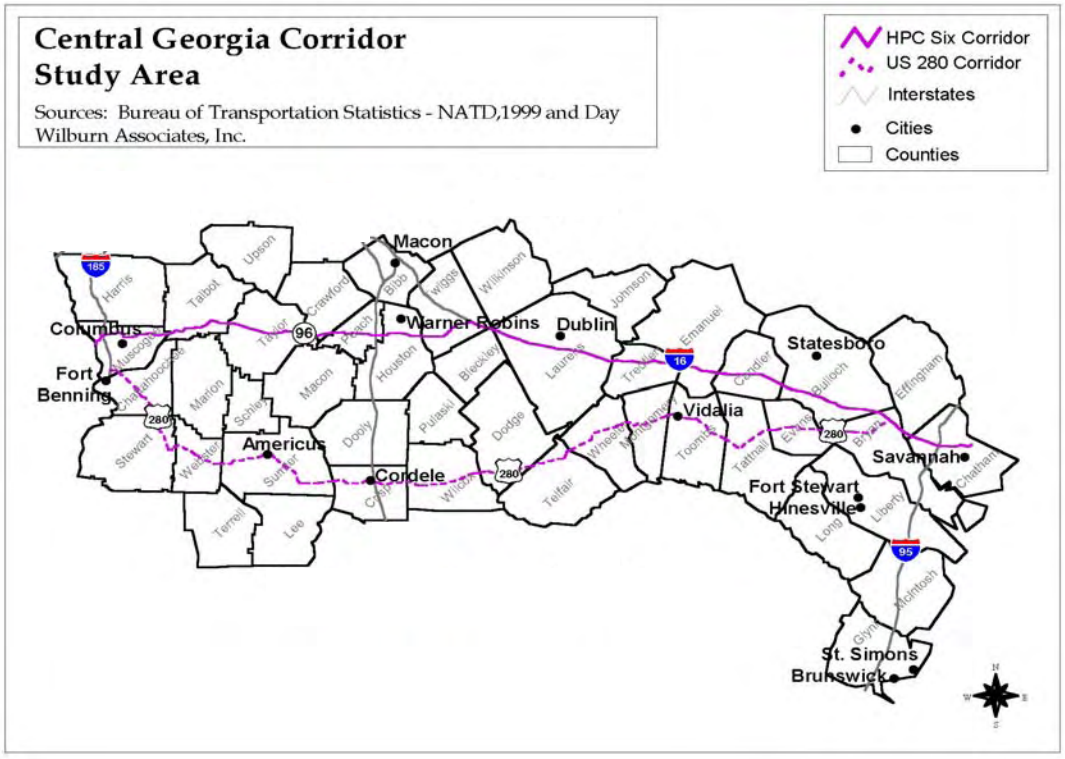


Figure E.2: Central Georgia Corridor Study Area Map



Study Background

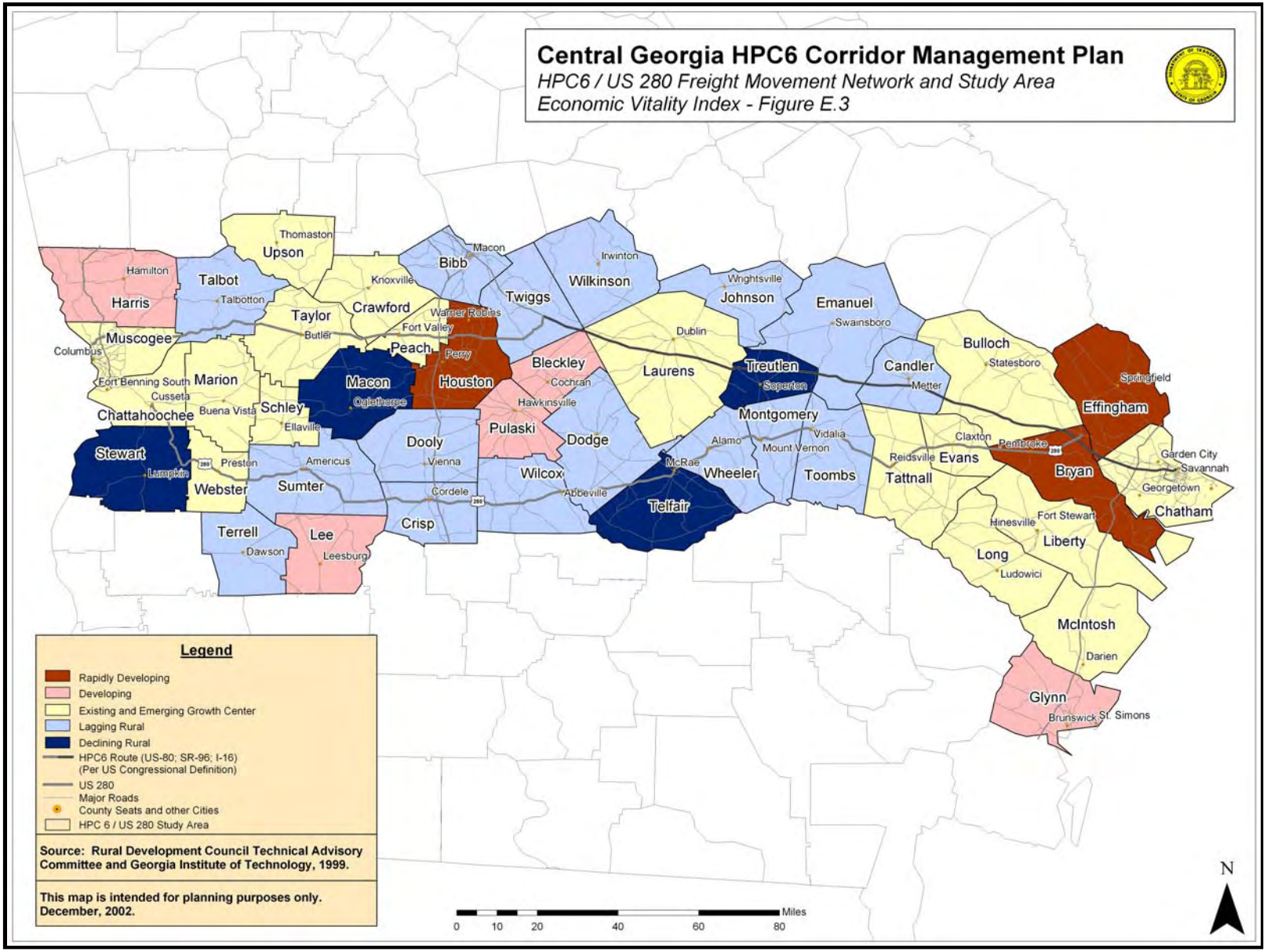
The 45-county study area features a diverse population, often characterized by low income, high poverty, and high unemployment in comparison to the state averages. In 2000, two initiatives addressed economic and transportation conditions in Georgia. The Georgia Rural Development Council (GRDC), together with the Georgia Institute of Technology, developed *The State of Rural Georgia Report*. *The Power Alley Initiative: An Assessment of the Economic Development Potential of State Infrastructure Investment in South Georgia* was prepared by the University of Georgia's Carl Vinson Institute in December 2000. The two initiatives concluded that coordinated and customized investment strategy in central Georgia is necessary to overcome these negative characteristics. The study identified that one key factor to sustain community growth is to maximize investment return through transportation infrastructure improvement. The studies also determined that additional investments in communication infrastructure, housing availability, or other economic investments, as opposed to transportation infrastructure alone, are often key to overall sustained community growth. Along with capital investments, strong and active leadership were also recommended for successful community development.

The GRDC's "Economic Vitality Index" is useful in identifying "Rapidly Developing" to "Declining" counties across Georgia. Counties in Georgia have been assigned to one of four tiers based on unemployment rates, poverty rates, and per capita income. Twenty-five of the 45 counties in the study area are classified as Rapidly Developing, Developing, or Existing/Emerging Growth Centers as shown in Figure E.3. The GRDC found these designations as representative of the potential to stimulate growth. The GRDC encourages investment in the corridor, and the Power Alley Initiative recommended focused investment in these 25 counties to create a "corridor of essential infrastructure" between Columbus and Savannah.

Building on the Economic Vitality Index, the ability of transportation infrastructure investment to promote community growth was analyzed using a Transportation Accessibility Index. The Transportation Accessibility Index reflects accessibility of counties to Interstates, commercial airports, business airports of regional impact, intermodal terminals, multi-lane highways, and major rail carriers. Decisions about transportation investment can be better considered by examining both indexes together. A county with a good (growing or emerging) economy and poor transportation access would be an excellent candidate for transportation improvements. Conversely, a county with a poor economy and high access may not need additional transportation investments, but may place more focus on other economic or social issues constraining growth and development.

To identify the specific transportation investment strategies necessary to enhance freight movement capability along HPC 6, the study team utilized several methods of data gathering and analysis. Technical data, along with input from stakeholders and

Figure E.3: Economic Vitality Index



major users of the freight transportation system, was analyzed to identify potential transportation deficiencies in the study area.

Outreach and Public Involvement

The primary goal of the outreach process was to create ample and ongoing opportunities for input into the development of the HPC 6 Corridor Management Plan. This was accomplished primarily through a series of regional stakeholder meetings held at critical points during plan development when focused input was needed to identify deficiencies and review proposed improvements. A representative group of stakeholders knowledgeable about transportation needs within their region was present at each meeting.

The stakeholder advisory committee, which functioned as an advisory group to the study team, was comprised of approximately 2,000 members selected from organizations directly impacted by the performance of the region's transportation system. Stakeholders were selected from a variety of backgrounds including government, industry, transportation, economic development, planning and engineering, public safety, trade, tourism, and special interest topics. The group included shippers, receivers, and freight carriers across all freight modes, regional advisory councils, chambers of commerce, development authorities, and individual citizens.

Interviews were conducted with a sampling of shippers and receivers and economic development officials throughout the region. The interviews enabled the study team to understand freight operations in the corridor and problems the users encounter. Approximately 250 shippers and receivers were contacted to provide input regarding freight movement operations, transportation problems, and potential solutions for problem areas. The interview results provided helpful information for the study team to use in identifying improvements to the freight movement network.

In addition to the stakeholder meetings, GDOT staff and consultant team members participated in GRDC meetings throughout the study area to provide information and gain public input. Study information was also disseminated through newsletters, distributed at the completion of each phase, and a study website. Each newsletter provided study information and status reports, opportunities for direct public participation, and key project contacts and sources for additional information. The availability of regular study updates and information was further ensured through the use of GDOT's website, which posted newsletters, presentations, maps, and contact information.

Significant input was received throughout the study as a result of the extensive public outreach. Congestion in small downtown areas was often noted during stakeholder outreach activities. In some cases, stakeholders suggested constructing bypass routes around the towns while in other cases they asked that Intelligent Transportation System

(ITS) technology involving the use of changeable message signs and cameras to improve traffic flow be considered. Signage deficiencies were noted, as well as recommended locations for turn lanes, acceleration lanes, and deceleration lanes. Safety was a prime concern at all meetings, with stakeholders pointing out deficient intersections and roadway conditions. At-grade intersections with railroad crossings were a primary concern to the stakeholders due to the delays experienced.

Interstate interchanges with safety and/or operational needs were noted, along with improvements for military transport within the corridor. Improvement of economic development roadways, such as the widening of US 280 to four lanes, was also mentioned in stakeholder meetings, and their completion is eagerly anticipated.

Overview of Methodology

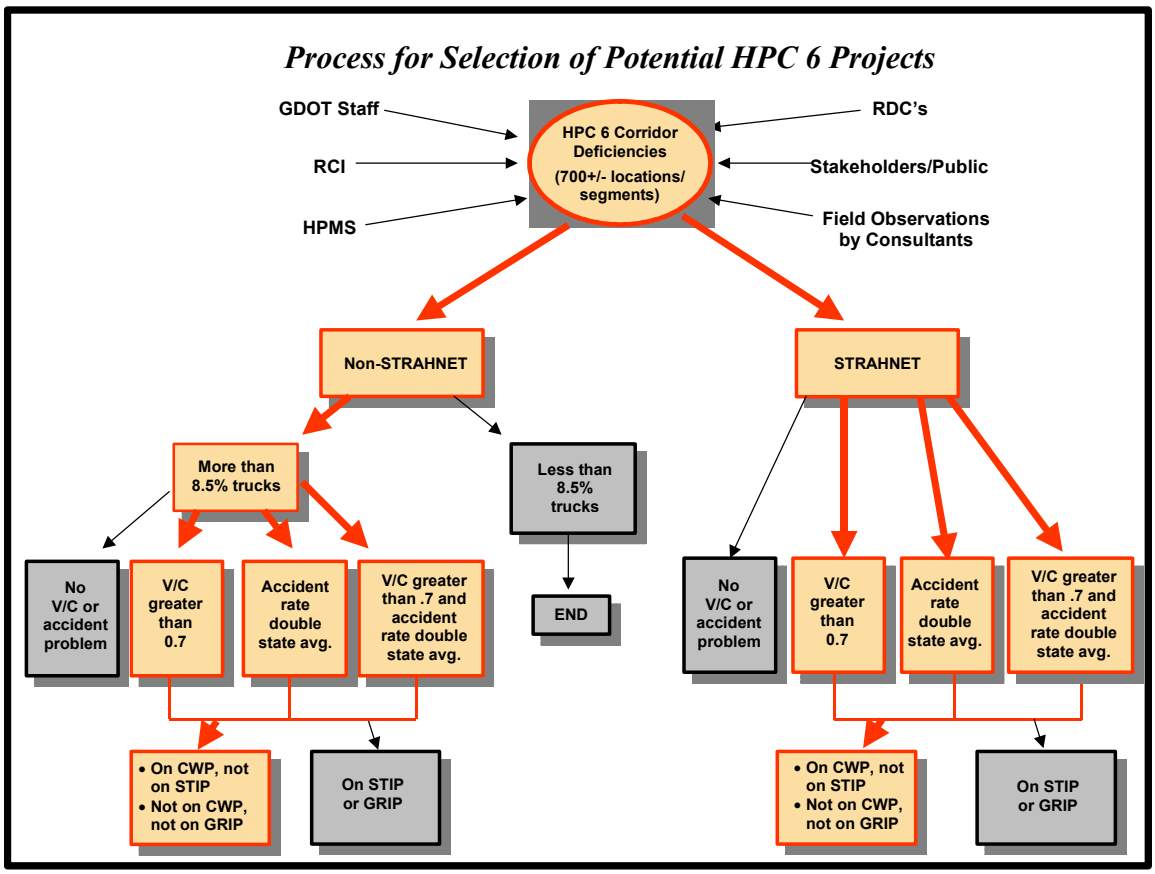
Transportation system deficiencies were identified through various methods. Technical data from the Road Characteristics Inventory (RCI) and Highway Performance Monitoring System (HPMS) databases were reviewed. These databases, maintained by GDOT and USDOT, provide current and historic information about the state's highway system. Interviews with stakeholders, including Regional Development Center (RDC) staff, economic development organization members, and GDOT staff, were conducted to identify potential deficient locations. Study team members also observed and noted deficiencies during numerous field visits and inventories.

The first two phases of the study involved evaluation of the transportation system and the identification of transportation deficiencies in the study area. Identified deficiencies were then screened in Phase 3 to determine those with both a definite freight focus and congestion or safety-based need for improvement. Figure E.4 illustrates the deficiency screening process. The first screen identified all routes in the study area that were freight-focused by virtue of being on the Strategic Highway Network System (STRAHNET)[2]. All identified deficiencies located on the STRAHNET were considered to be freight-focused. Roadways not located on STRAHNET, but carrying above average percentages of truck traffic, were also considered to have a freight focus. Since average truck traffic for roadways in the study area was 8.5%, this was considered to be the logical threshold. Statistics from the 1998 or 2001 HPMS database were used to determine current truck traffic percentages, as well 2025 forecast truck traffic.

The next screen of deficiencies evaluated congestion or safety problem areas. A volume to capacity (v/c) ratio of 0.7 or greater was the threshold for identifying present and future potentially deficient locations. A v/c ratio is used to determine the volume of traffic on a roadway in relation to the capacity of the roadway. The higher a v/c ratio, the greater the level of roadway congestion. This threshold of 0.7 is lower than that used for urbanized areas (usually 0.8 to 1.0) because congestion in less populated areas is felt more keenly at lower levels and is less expected.

[2] STRAHNET is a system of public highways that provides access, continuity, and emergency transportation of personnel and equipment in times of peace and war.

Figure E.4: Deficiency Screening Process



Safety-related deficient locations were identified as those with accident rates equal to or greater than double the statewide average. By utilizing a standard of accident rates double the statewide average, the study team was able to greatly narrow the list to those locations with the most serious potential safety needs[3].

The final screen identified locations with a project programmed in the Statewide Transportation Improvement Program[4] (STIP) or included in the GRIP. Deficiencies with projects included in either of these programs were considered to have a solution identified and were, therefore, not carried forward in the evaluation process.

Hundreds of potential deficiencies were identified and screened through the process described above. The screening process resulted in a list of 34 deficient locations for which projects were developed.

[3] The list of identified deficiencies including safety-related locations is included in the Phase 2 Report, Chapter 5.

[4] The STIP is an annual, financially constrained list of projects programmed by GDOT for the next three years. Funding has been identified and secured for all projects listed in the three-year STIP.

Project Development

Project descriptions were developed for the final 34 identified deficient locations or roadway segments, along with cost estimates and recommended implementation phases (short, mid, or long-range). Implementation phasing for the projects located on the Interstate system were deferred for further analysis during development of the Georgia Interstate System Plan, currently underway and scheduled for completion in early 2004. The project descriptions, cost estimates, and recommended phases are shown in Table E.1.

In addition to the 34 projects, many of the deficiencies identified during the study were recommended for implementation as best practices during future construction or rehabilitation of existing intersections, roadways, or bridges. These recommended best practices consist of shoulder widenings, including the inside shoulders of Interstates; standards for future bridge replacements; intersection resurfacing; railroad crossing grade separations; passing lanes; and white topping (concrete overlay on asphalt) at high truck movement intersections. The locations that would benefit from the implementation of these practices were presented as Appendices D-H to the Phase 2 report.

Table E.1: Projects

MAIN ROUTE	COUNTY	PROJECT DESCRIPTION	COST ESTIMATE	PHASE*
SR 307/ I-16	Chatham	SR 307 (Dean Forest Road)/I-16 Interchange improvement	$27,774,440	S
New Location	Chatham	Jimmy DeLoach Parkway Extension from SR 21 to SR 25	$15,137,043	S
SR 96	Houston	Phase 1 of 5: Operational improvements, intersection improvements, and turn lanes on SR 96 between I-75 and SR 247	$25,785,772	S
SR 96	Peach	Connect Fort Valley Bypass (SR 49C) to SR 96 east of Fort Valley connecting existing bypass to SR 96	$16,061,847	S
Subtotal			$84,759,102	
SR 49	Bibb	Widen SR 49 from five lanes to six lanes divided from Maynard Street to New Clinton Road	$20,314,355	M
US 41	Bibb	Widen US 41 from five lanes to six lanes divided between US 129 and I-75	$7,545,000	M
US 301 BYPASS	Bulloch	Widen US 301 from two to four lanes divided from US 80 to SR 67	$3,991,972	M
SR 204	Chatham	Reconstruct SR 204 from four-lane arterial to six-lane freeway from US 17 to Veterans Parkway	$29,475,873	M

** S = Short-Range; M= Mid-Range; L = Long-Range; D = Deferred to Interstate System Plan*

Table E.1: Projects (cont'd.)

MAIN ROUTE	COUNTY	PROJECT DESCRIPTION	COST ESTIMATE	PHASE*
SR 21 SPUR	Chatham	Widen SR 21 Spur from two lanes to five lanes from SR 25 E to end of road	$13,018,714	M
SR 96	Houston	Phase 2 of 5: Operational and grade separation improvements on SR 96 between I-75 and Ocmulgee River	$67,985,990	M
SR 96	Houston	Phase 3 of 5: Purchase ROW for future four-lane divided roadway and frontage roads on SR 96 between Lake Joy Road and Thompson Mill Road	$95,811,467	M
SR 119	Liberty	Widen the common part of SR 119 and SR 196 from four lanes to six lanes	$24,491,990	M
US 80	Muscogee	Widen US 80 from the Alabama state line to I-185 from four lanes to six lanes	$17,419,612	M
Subtotal			$280,054,973	
US 129	Bibb	Widen US 129 from four to six lanes from .5 miles north of SR 49 to .5 miles north of North Graham Road and widen US 129 from six to eight lanes from US 23 to .5 miles north of SR 49	$44,795,300	L
US 41	Bibb	Widen US 41 between Houston Road and US 129 from six to eight lanes	$42,232,167	L
US 129	Bibb	Widen US 129 from six to eight lanes from I-16 EB exit ramp to US 23/ Emery Hwy.	$4,377,731	L
US 129	Bibb	Widen US 129 from four to six lanes divided from South Bibb County Line to SR 41	$35,822,663	L
SR 21	Chatham	Reconstruct Derenne Avenue from I-516 to Truman Parkway as a four-lane freeway with interchange at Abercorn and Truman Parkway	$147,944,762	L
SR 25	Chatham	Widen SR 25 from five lanes to six lanes divided from SR 25C to SR 21 Spur	$9,142,592	L
SR 96	Houston	Phase 4 of 5: Widen SR 96 from two lanes to four-lane divided from US 41 to Thompson Mill Road	$92,737,050	L
SR 96	Houston	Phase 5 of 5: Widen SR 96 from two lanes to four lanes from Fort Valley to US 41 and from Thompson Mill Rd to I-16	$87,780,944	L
US 129	Houston	Widen US 129 from five lanes to six lanes divided from SR 247 C to SR 96	$43,140,195	L
US 27	Muscogee	Construct four-lane freeway with four-lane frontage road on US 27/US 280 from Alabama state line to 1.5 miles east of I-185	$264,901,144	L
Subtotal			$772,874,548	

** S = Short-Range; M= Mid-Range; L = Long-Range; D = Deferred to Interstate System Plan*

Table E.1: Projects (cont'd.)

MAIN ROUTE	COUNTY	PROJECT DESCRIPTION	COST ESTIMATE	PHASE*
I-75	Bibb	Widen I-75 from six to eight lanes from south Bibb County line to I-475	$17,329,096	D
I-16	Bryan	Widen I-16 from four to six lanes from east Bryan County line to US 280	$24,143,847	D
I-95	Bryan	Widen I-95 from six to eight lanes one mile south of US 17 to north Bryan County line	$19,274,262	D
I-16	Chatham	Widen I-16 from four to six lanes throughout Chatham County and reconstruct I-16/I-95 interchange and I-16/I-516	$69,336,434	D
I-516	Chatham	Widen the entire I-516 corridor from four to six lanes	$42,909,392	D
I-95	Chatham	Widen I-95 from six to eight lanes throughout Chatham County	$93,785,574	D
I-75	Crisp	Widen I-75 from four to eight lanes throughout Crisp County	$69,725,099	D
I-75	Dooly	Widen I-75 from six to eight lanes throughout Dooly County	$60,801,520	D
I-16	Effingham	Widen I-16 from four to six lanes throughout Effingham County	$11,835,970	D
I-95	Glynn	Widen I-95 from four to six lanes from US 82/17 to US 25	$ 73,316,672	D
I-185	Harris/ Muscogee	Widen I-185 from four to six lanes from MP 12 in Muscogee County to MP 19 in Harris County	$17,066,653	D
I-75	Houston	Widen I-75 from six to eight lanes throughout Houston County	$62,782,783	D
I-185	Muscogee	Widen I-185 or construct parallel facility east of I-185 connecting US 280 and US 80	$215,817,000	D
I-185	Muscogee	Widen I-185 from four to six lanes from US 80 to north Muscogee County line	$15,900,614	D
I-75	Peach	Widen I-75 from six to eight lanes throughout Peach County	$45,968,564	D
Subtotal			$794,024,920	
Total			**$2,030,695,190**	

** S = Short-Range; M= Mid-Range; L = Long-Range; D = Deferred to Interstate System Plan*

Projects Recommended for NCPD Funding

NCPD funding is limited and therefore very competitive among high priority corridors throughout the nation. A key focus of this study and the resultant corridor plan was to define a short list of improvements with the greatest potential for providing overall benefit to the freight-moving capacity of HPC 6.

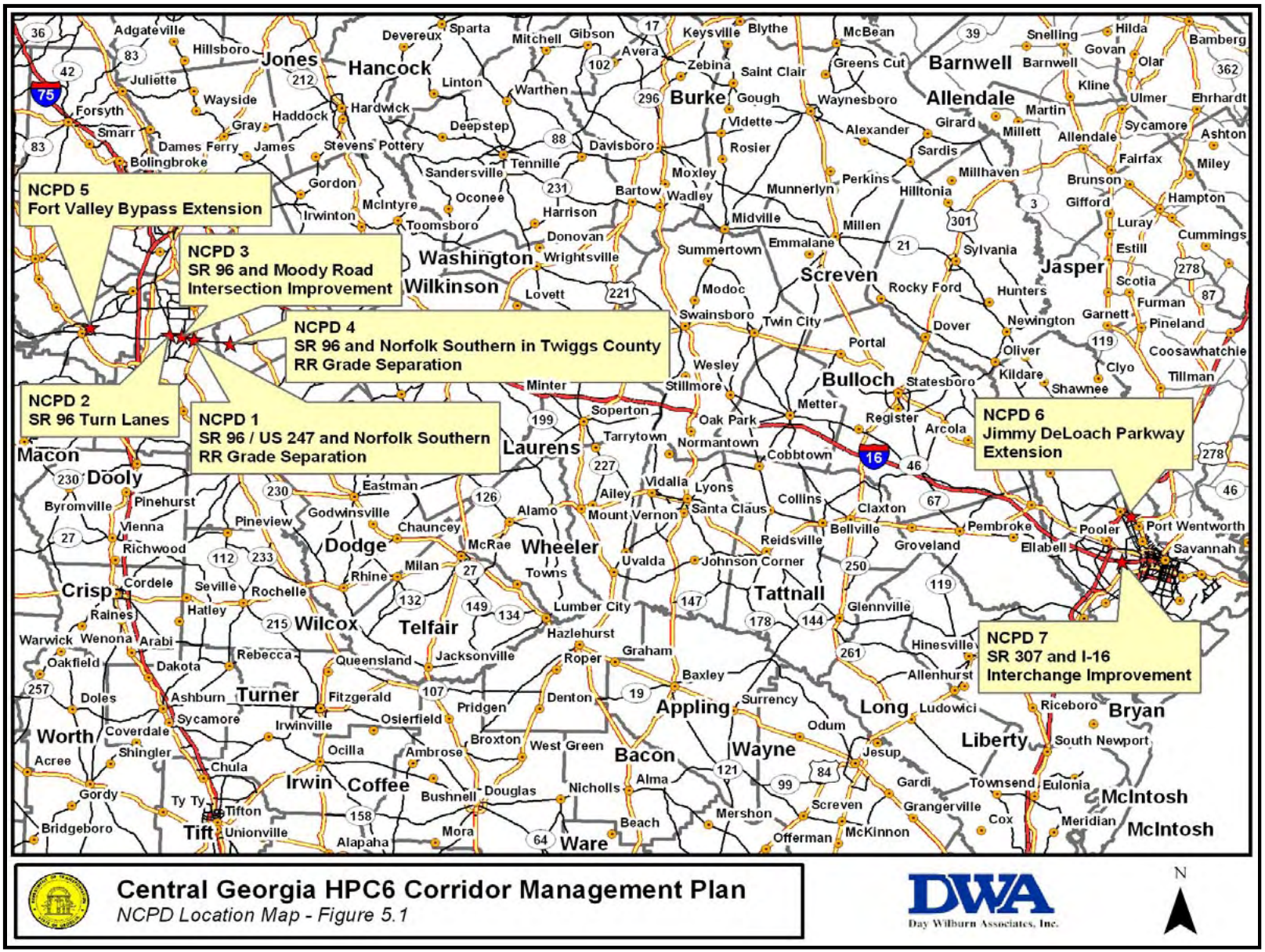
The projects recommended for pursuit of NCPD funding are located in two general areas within the study area: SR 96 (Peach, Houston, and Twiggs Counties) south of Warner Robins and near the Port of Savannah. Projects located on the HPC 6 mainline and near the Port of Savannah provide the maximum benefit to freight and military movement along the corridor. Descriptions and cost estimates of the seven recommended projects are shown in Table E.2, with their locations illustrated in Figure E.5.

Table E.2: NCPD Projects

Reference Number	Project Location and General Description	Cost Estimate
NCPD 1	State Route 96/State Route 247 Intersection Improvements and Grade Separation, Houston County	$21,128,483
NCPD 2	State Route 96 Turn Lanes, Houston County	$801,676
NCPD 3	State Route 96/Moody Road Intersection Improvement, Houston County	$8,755,697
NCPD 4	State Route 96/Norfolk Southern Railroad Grade Separation, Twiggs County	$2,237,343
NCPD 5	Ft. Valley Bypass Extension Northeast of Fort Valley, Peach County	$16,061,847
NCPD 6	Jimmy DeLoach Parkway Extension from SR 21 to SR 25, Chatham County	$15,137,043
NCPD 7	Interstate 16/Dean Forest Road (SR 307) Interchange Improvement, Chatham County	$27,774,440
Total		**$91,896,529**

Detailed information for each project, including its location, description, need and purpose, concept sketch, and detailed cost estimate, is located in Chapter 5 and Appendix D of the HPC 6 Corridor Management Plan.

Figure E.5: NCPD Project Locations



Next Steps

GDOT will utilize the package of NCPD recommended projects to compete with other high priority corridors for NCPD funding. The solid freight movement related need and purpose developed for each project will provide a strong basis in competing for the funding. While the requirements for NCPD related funds may change under future federal transportation legislation, GDOT's need and purpose based approach for requesting NCPD funds through Georgia's Congressional delegation will provide a competitive edge for Georgia's pursuit of future NCPD funding.

In addition to the 34 projects identified for enhancing freight movement in the central Georgia corridor and the seven projects considered to be most competitive for NCPD funding, other freight movement deficiencies were identified through the study. A list of pavement, bridge, and railroad crossing deficiencies has been provided to each GDOT District Planning and Programming Engineer in the study area for their utilization in enhancing freight movement throughout the study area.

Conclusion

During the three phases of the Central Georgia Corridor Study, data from technical analysis and interviews with stakeholders and users of the transportation system resulted in the identification of hundreds of potentially deficient locations. These freight focused locations were screened to identify those with a congestion or safety deficiency and without an identified solution. The study identified 34 deficient locations that met the criteria. Seven projects along HPC 6 that would be the most competitive for NCPD funding were defined in detail, with a freight related need and purpose statement supporting each project.

For further details about the methodology used for the study and its results, refer to:
Phase I Report (Corridor & Transportation System Evaluation)
Phase II Report (Development, Evaluation, & Selection of Recommended Improvements)
Final Report (Central Georgia HPC 6 Corridor Management Plan)

For additional information concerning the Central Georgia Corridor Study, contact:
Georgia Department of Transportation, Office of Planning at (404) 657-6699

Vance C. Smith, Jr., Commissioner

GEORGIA DEPARTMENT OF TRANSPORTATION

One Georgia Center, 600 West Peachtree Street, NW
Atlanta, Georgia 30308
Telephone: (404) 631-1000

October 20, 2010

Statewide Location Bureau
OCT 26 2010

The Honorable Martin H. Moseley
Commission Chairman
205 West Church Street, Suite 204
Fort Valley, Georgia 31030

Dear Mr. Moseley:

I am returning for your files an executed agreement between the Georgia Department of Transportation and Peach County for the following project:

PROJECT#: CSSTP-0006-00(963) Peach County, P.I. #0006963

We look forward to working with you on the successful completion of the joint project.
Should you have any questions, please contact the Project Manager Dave Peters at (770)699-4453.

Sincerely,

Angela Robinson

Angela Robinson,
Financial Management Administrator

AR:rm

Enclosure

c: Bob Rogers
David Millen - District 3
Tom Queen – District 3
Kerry Gore – District 3
Jeff Baker – Utilities

AGREEMENT

BETWEEN

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

AND

PEACH COUNTY

FOR

TRANSPORTATION FACILITY IMPROVEMENTS

This Framework Agreement is made and entered into this 3rd day of February, 2010, by and between the DEPARTMENT OF TRANSPORTATION, an agency of the State of Georgia, hereinafter called the "DEPARTMENT", and **PEACH COUNTY,** acting by and through its Board of Commissioners, hereinafter called the "LOCAL GOVERNMENT".

WHEREAS, the LOCAL GOVERNMENT has represented to the DEPARTMENT a desire to improve the transportation facility described in Attachment A, attached and incorporated herein by reference and hereinafter referred to as the "PROJECT"; and

WHEREAS, the LOCAL GOVERNMENT has represented to the DEPARTMENT a desire to participate in certain activities including the funding of certain portions of the PROJECT and the DEPARTMENT has relied upon such representations; and

WHEREAS, the DEPARTMENT has expressed a willingness to participate in certain activities of the PROJECT as set forth in this Agreement; and

WHEREAS, the Constitution authorizes intergovernmental agreements whereby state and local entities may contract with one another "for joint services, for the provision of services, or for the joint or separate use of facilities or equipment; but such contracts must deal with activities, services or facilities which the parties are authorized by law to undertake or provide." Ga. Constitution Article IX, §III, ¶I(a).

NOW THEREFORE, in consideration of the mutual promises made and of the benefits to flow from one to the other, the DEPARTMENT and the LOCAL GOVERNMENT hereby agree each with the other as follows:

1. The LOCAL GOVERNMENT shall contribute to the PROJECT by funding all or certain portions of the PROJECT costs for the preconstruction engineering (design), hereinafter referred to as "PE", all reimburseable utility/railroad relocations, all non-reimburseable utilities owned by the LOCAL GOVERNMENT, railroad costs, right of way acquisitions and construction, as specified in Attachment A, attached hereto and incorporated herein by reference. Expenditures incurred by the LOCAL GOVERNMENT prior to the execution of this AGREEMENT or subsequent funding agreements shall not be considered for reimbursement by the DEPARTMENT. Upon execution of this Agreement, the LOCAL GOVERNMENT hereby agrees and shall transfer to the DEPARTMENT the sum of ZERO and No/100 Dollars ($0.00) for the purpose of providing the DEPARTMENT with the local match for the costs of the PE activities.

2. The DEPARTMENT shall contribute to the PROJECT by funding all or certain portions of the PROJECT costs for the PE activities, right of way acquisitions or construction as specified in Attachment A.

3. It is understood and agreed by the DEPARTMENT and the LOCAL GOVERNMENT that the funding portion as identified in Attachment "A" of this Agreement only applies to the PE. The Right of Way and Construction funding estimate levels as specified in Attachment "A" are provided herein for planning purposes and do not constitute a funding commitment for right of way and construction. The DEPARTMENT will prepare LOCAL GOVERNMENT Specific Activity Agreements for funding applicable to Right of Way or Construction when appropriate.

Further, the LOCAL GOVERNMENT shall be responsible for repayment of any expended federal funds if the PROJECT does not proceed forward to completion due to a lack of available funding in future PROJECT phases, changes in local priorities or cancelation of the PROJECT by the LOCAL GOVERNMENT without concurrence by the DEPARTMENT.

4. The LOCAL GOVERNMENT shall be responsible for all costs for the continual maintenance and operations of any and all sidewalks and the grass strip between the curb and the sidewalk within the PROJECT limits.

5. Both the LOCAL GOVERNMENT and the DEPARTMENT hereby acknowledge that Time is of the Essence. It is agreed that both parties shall adhere to the schedule of activities currently established in the approved Transportation Improvement Program/State Transportation Improvement Program, hereinafter referred to as "TIP/STIP". Furthermore, all parties shall adhere to the detailed project schedule as approved by the DEPARTMENT, attached as Attachment B and incorporated herein by reference. In the completion of respective commitments contained herein, if a change in the schedule is needed, the LOCAL GOVERNMENT shall notify the DEPARTMENT in writing of the proposed schedule change and the DEPARTMENT shall acknowledge the change through written response letter; provided that the DEPARTMENT shall have final authority for approving any change.

If, for any reason, the LOCAL GOVERNMENT does not produce acceptable deliverables in accordance with the approved schedule, the DEPARTMENT reserves the right to delay the PROJECT's implementation until funds can be re-identified for construction or right of way, as applicable.

6. The LOCAL GOVERNMENT shall certify that the regulations for "CERTIFICATION OF COMPLIANCES WITH FEDERAL PROCUREMENT REQUIREMENTS, STATE AUDIT REQUIREMENTS, AND FEDERAL AUDIT REQUIREMENTS" are understood and will comply in full with said provisions.

7. The DEPARTMENT shall accomplish all of the PE activities for the PROJECT.

8. The LOCAL GOVERNMENT, unless shown otherwise on Attachment A, shall acquire the Right of way in accordance with the law and the rules and regulations of the FHWA including, but not limited to, Title 23, United States Code; 23 CFR 710, et. Seq., and 49 CFR Part 24 and the rules and regulations of the DEPARTMENT. Upon the DEPARTMENT's approval of the PROJECT right of way plans, verification that the approved environmental document is valid and current, a written notice to proceed will be provided by the DEPARTMENT for the LOCAL GOVERNMENT to stake the right of way and proceed with all pre-acquisition right of way activities. The LOCAL GOVERNEMENT shall not proceed to property negotiation and acquisition whether or not the right of way funding is Federal, State or Local, until the right of way agreement named "Contract for the Acquisition of Right of Way" prepared by the DEPARTMENT's Office of Right of Way is executed between the LOCAL GOVERNMENT and the DEPARTMENT. Failure of the LOCAL GOVERNMENT to adhere to the provisions and requirements specified in the acquisition contract may result in the loss of Federal funding for the PROJECT and it will be the responsibility of the LOCAL GOVERNMENT to make up the loss of that funding. Right of way costs eligible for reimbursement include land and improvement costs, property damage values, relocation assistance expenses and contracted property management costs. Non reimbursable right of way costs include administrative expenses such as appraisal, consultant, attorney fees and any in-house property management or staff expenses. The LOCAL GOVERNMENT shall certify that all required right of way is obtained and cleared of obstructions, including underground storage tanks, 3 months prior to advertising the PROJECT for bids.

9. The LOCAL GOVERNMENT unless otherwise noted in attachment "A" shall be responsible for funding all LOCAL GOVERNMENT owned utility relocations and all other reimbursable utility/railroad costs. The costs include but are not limited to PE, easement acquisition, and construction activities necessary for the utility/railroad to accommodate the PROJECT. The terms for any such reimbursable relocations shall be laid out in an agreement that is supported by plans, specifications, and itemized costs of the work agreed upon and shall be executed prior to certification by the DEPARTMENT. The LOCAL GOVERNMENT shall certify via written letter to the DEPARTMENT's Project Manager and District Utilities Engineer that all Utility owners' exsiting and proposed facilities are shown on the plans with no conflicts 3 months prior to advertising the PROJECT for bids and that any required agreements for reimbursable utility/railroad costs have been fully executed. Further, this certification letter shall state that the LOCAL GOVERNMENT understands that it is responsible for the costs of any additional reimbursable utility/railroad confilcts that arise on construction.

10. The DEPARTMENT will be responsible for all railroad coordination on DEPARTMENT Let and/or State Route (On-System) projects; the LOCAL GOVERNMENT shall address concerns, comments, and requirements to the satisfaction of the Railroad and the DEPARTMENT. If the LOCAL GOVERNMENT is shown to LET the construction in Attachment "A" on off-system routes, the LOCAL GOVERNMENT shall be responsible for all railroad coordination and addressing concerns, comments, and requirements to the satisfaction of the Railroad and the DEPARTMENT for PROJECT.

11. The DEPARTMENT, unless otherwise shown in Attachment "A", shall be responsible for Letting the PROJECT to construction, solely responsible for executing any agreements with all applicable utility/railroad companies, and securing and awarding the construction contract for the PROJECT when the certification (that all needed rights of way have been obtained and cleared of obstructions) has been submitted by the LOCAL GOVERNMENT. If the LOCAL GOVERNMENT is shown to LET the construction in Attachment "A", the LOCAL GOVERNMENT shall follow the requirements stated in Chapter 10 of the DEPARTMENT"s Local Administered Project Manual.

12. The LOCAL GOVERNMENT agrees that all reports, studies, estimates, maps, computations, computer files and printouts, and any other data prepared under the terms of this Agreement shall become the property of the DEPARTMENT if required. This data shall be organized, indexed, bound, and delivered to the DEPARTMENT no later than the advertisement of the PROJECT for letting. The DEPARTMENT shall have the right to use this material without restriction or limitation and without compensation to the LOCAL GOVERNMENT.

This Agreement is made and entered into in FULTON COUNTY, GEORGIA, and shall be governed and construed under the laws of the State of Georgia.

The covenants herein contained shall, except as otherwise provided, accrue to the benefit of and be binding upon the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the DEPARTMENT and the LOCAL GOVERNMENT have caused these presents to be executed under seal by their duly authorized representatives.

DEPARTMENT OF TRANSPORTATION

BY: _____
Commissioner

ATTEST: _____
Treasurer

PEACH COUNTY BOARD OF COMMISSIONERS

BY: _____
Name Martin H. Moseley, Jr.
Title Chairman, Peach County Board of Commissioners

Signed, sealed and delivered this ____ day of _____, 20__, in the presence of:

_____
Witness

_____
Notary Public 1-30-2013

This Agreement approved by Local Government, the 8th day of December, 2009

Attest
_____
Name and Title Marcia W. Johnson
Peach County Administrator

FEIN: 58-6000873

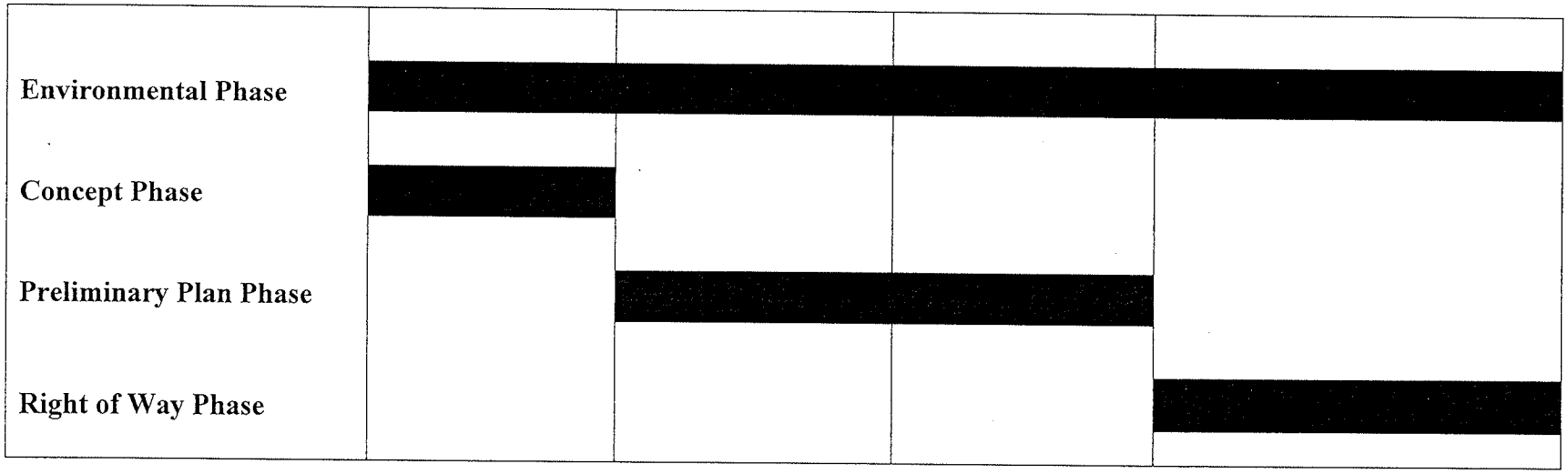
ATTACHMENT "A"
Project Number: CSSTP-0006-00 (963) – Peach County

Project	Preliminary Engineering		Right of Way			Construction		Utility Relocation	
(PI#, Project #, Description)	Funding	PE Activity by	*Funding of Real Property	Acq. by	Acq. Fund by	*Funding	Letting by	Utility Funding by	Railroad Funding by
PI# 0006963, CSSTP-0006-00 (963), SR 49 Connector	AUTHORIZED	GEORGIA DOT.	(80%) Federal($11,181,603.06) (20%) State ($2,795,400.76) (0%) LCL GOV ($0) >($) 100% Local Gov.	GDOT	GDOT	(80%) Federal ($6,515,578.51) (20%)State ($1,628,894.63) (0%) LCL GOV ($0) >($) 100% Local Gov.	GDOT	100% Local Gov.	100% Local Gov.

Note: Maximum allowable GDOT participating amounts for PE category shall be shown above. Local Government will only be reimbursed the percentage of the accrued invoiced amounts up to but not to exceed the maximum amount indicated. *R/W and Construction amounts shown are estimates for budget planning purposes only.

ATTACHMENT "B"
CSSTP-0006-00 (963) – Peach County

Proposed Project Schedule



Deadlines for Responsible Parties	Execute Agreement	1/2010 (Approve Concept)	10/2011 (Approve Env. Document)	LR (Authorize Right of Way funds)	LR (Authorize Const. funds)

Vance C. Smith, Jr., Commissioner

GEORGIA DEPARTMENT OF TRANSPORTATION

One Georgia Center, 600 West Peachtree Street, NW
Atlanta, Georgia 30308
Telephone: (404) 631-1000

October 6, 2010

Mayor John E. Stumbo
P.O. Box 956
204 West Church Street
Fort Valley, GA 31030

RE: Roundabout lighting required for proposed SR 49 Connector/SR 49 intersection improvements
GDOT Project CSSTP-0006-00(963), P.I. No. 0006963, Peach County

Dear Mayor Stumbo,

The above-referenced project is now in the Concept Development stage of GDOT's Plan Development Process. A roundabout is being proposed for this project. The Project Concept Report is now being drafted for approval.

For this project, roundabout lighting is both a necessary design component and requirement. The warranting conditions for lighting, based on Illuminating Engineering Society of North America (IESNA) and American Association of State Highway and Transportation Officials (AAHSTO) guidelines, have been met.

At this time, the Department is requesting a written commitment from the City of Fort Valley. This commitment should state that the City of Fort Valley is willing to share in the costs of the lighting by funding the energy, operation and maintenance of the installed lighting system. The Department's responsibility shall be the design and construction costs, including all materials. Currently, the Department estimates the monthly cost to power the roundabout lighting to be approximately $300.00 to $500.00 per month, depending on local power rates.

If the City of Fort Valley agrees to share in the costs for the installed lighting system, please reply to Brent Story, Office of Design Policy & Support – Attention: Ken Thompson, Location Bureau Chief, within the next 30 days. If the Department does not receive a written response, it will be assumed that the City of Fort Valley cannot fund or participate in the energy, operation and maintenance costs of the installed lighting system. In the event that the City of Fort Valley does not commit to funding the energy, operation and maintenance of the installed lighting system, the Department may elect to change the scope of the project and/or suspend further development of the project Concept.

Thank you for your cooperation. Should you have any questions or need any additional assistance, please contact Dave Peters at (404) 699-4453.

Sincerely,

Brent A. Story/KET

Brent A. Story, P.E.
State Design Policy Engineer

BAS:KET:ekp

cc: Johnny Floyd, GDOT Transportation Board Member, Congressional District 2
Martha McAfee, Fort Valley City Administrator
David Millen, District Engineer

RECV'D 10/29/10
KET

City of Fort Valley

P. O. Box 956 • 204 West Church Street • Fort Valley, Georgia 31030
478-825-8567 • Fax: 478-825-3654

JOHN E. STUMBO
MAYOR

JOHN W. EZELL, JR.
MAYOR PRO-TEM

COUNCIL MEMBERS

JIMMY BARNES
BETH COLLINS
MELBA HESTER
FLORINE V. STATHAM
BARBARA B. WILLIAMS

MARTHA J. MCAFEE
CITY ADMINISTRATOR

CHARLES E. JONES
CITY ATTORNEY

CYNTHIA ADAMS, J.D.
MUNICIPAL COURT JUDGE

October 22, 2010

Mr. Brent Story
Office of Design Policy & Support
GA Department of Transportation
One Georgia Center
600 West Peachtree St. SW
Atlanta, GA 30308

Re: GDOT Project CSSTP-0006-00(963), P.I. No. 0006963, Peach County

Dear Mr. Story:

Please be advised that on October 21, 2010, the Mayor and Council of the City of Fort Valley voted to share in the cost of the lighting by funding the energy, operation and maintenance of the installed lighting system for the above referenced project.

If further is needed, please advise.

Sincerely,

Martha J. McAfee

RESOLUTION REGARDING
LIGHTING FOR ROUNDABOUT
HIGHWAY 49 NORTH @ 49 CONNECTOR

WHEREAS: The Georgia Department of Transportation (DOT) is in the planning stage of constructing a roundabout at the intersection of Highway 49 and Highway 49 Connector; and,

WHEREAS: DOT has requested support from the City of Fort Valley in the form of a commitment to share in the costs of the lighting by funding the energy, operation and maintenance of the installed lighting system; and,

WHEREAS: Lighting of the roundabout is necessary for the safety of travelers opting to take this route.

BE IT HEREBY RESOLVED THAT the City of Fort Valley does hereby commit to supporting the completion of this project by sharing in the costs of the lighting by funding the energy, operation and maintenance of the installed lighting system.

This 21st day of October, 2010.

Beth Collins

Barbara B. Williams

Melba Hunter