ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. # 752300
STP00-0222-01(001)
Cobb County
I-285 @ Atlanta Road/CR 4519

OFFICE Design Policy & Support

DATE October 15, 2010

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 Adminstrator
Ron Wishon, State Project Review Engineer
Glenn Bowman, State Environmental Administrator
Ken Thompson, Statewide Location Bureau Chief
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BOARD MEMBERS - 6th & 13th Congressional Districts

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

Project Number: STP00-0222-01-(001)
County: Cobb
P. I. Number: 752300
Federal Route Number: I-285
State Route Number: SR 407

I-285 @ CR4519/Atlanta Road – Operational Improvements to interchange and I-285 corridor between Atlanta Road and Paces Ferry Road

Submitted for approval:

DATE 4/21/10 — PBS&J
Design Consultant Name and Firm Name

DATE 4/21/10 — Local Government

DATE _____ — Design Phase Office Head

DATE 4/22/2010 — Office Head (Project Manager's Office)

DATE 4/21/10 — Project Manager

Recommendation for approval:

DATE _____ — State Design Policy Engineer

DATE _____ — Program Control Administrator

DATE 4/28/10 — GLENN BOWMAN*/EKP
State Environmental Administrator

DATE 5/18/10 — KATHY ZAHUL FOR*/EKP
State Traffic Operations Engineer

DATE 5/7/10 — RON WISHON*/EKP
Project Review Engineer

DATE 4/30/10 — BRYANT POOLE*/EKP
District Engineer

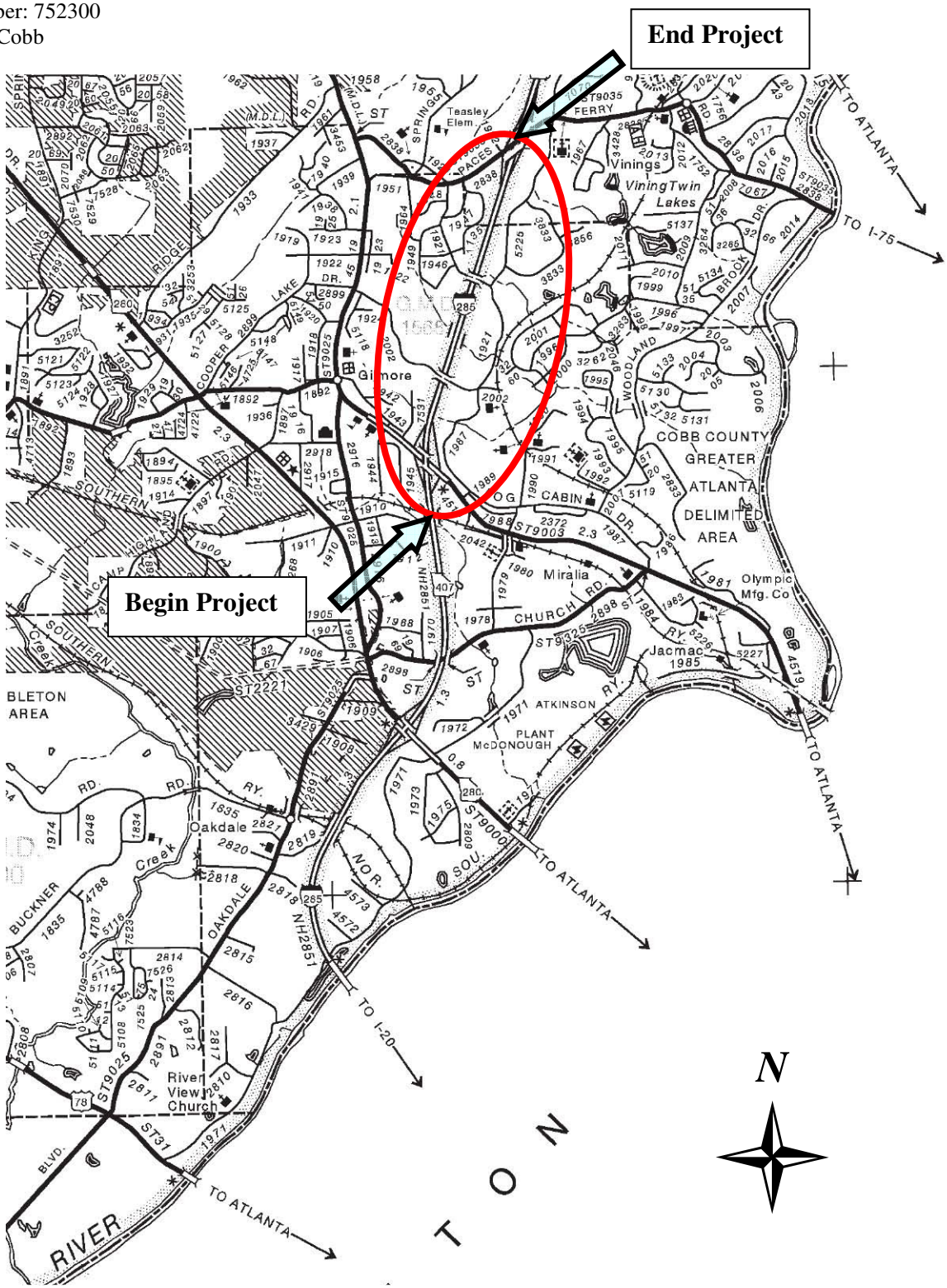
DATE 4/30/10 — PAUL LILES*/EKP
State Bridge Design Engineer

DATE _____ — State Transportation Financial Management Administrator

*RECOMMENDATION ON FILE

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 5-6-2010 — State Transportation Planning Administrator



Scale: 1 inch = 1 mile

Location Map

Project: STP00-0222-01(001) Cobb County **PI No.:** 752300

Description: I-285 @ CR 4519/Atlanta Road

Need and purpose

Introduction

The purpose of and need for the proposed project is to improve the operational efficiency of the Atlanta Road at I-285 interchange. The improvements proposed along Atlanta Road would occur from just west of the intersection of Atlanta Road and N. Church Lane and end at the intersection of Atlanta Road and Pine Street. Total project length is approximately 0.57 miles along Atlanta Road and approximately 1.77 miles along I-285.

Background

Based on information obtained from Cobb County, the proposed reconfiguration of the I-285 at Atlanta Road interchange was once part of the larger East-West Connector Phase V project, which would have provided a direct connection from the East-West Connector to I-285. However, due to the rapid rate of development in the area and public opposition to the flyover ramps that would be needed to make the direct connection, the scope of the larger East West Connector Phase V project was scaled back to include only the improvements at the Atlanta Road/I-285 interchange. These improvements would reconfigure the Atlanta Road at I-285 interchange to improve the operational efficiency of the interchange. The proposed project is the last link in a series of projects that are intended to improve the connection between Cobb County and Atlanta. The Cobb County Department of Transportation (Cobb DOT) has recently completed improvements on the segment of Atlanta Road located just west of the proposed project, and they are currently in the process of replacing the existing Atlanta Road bridge over the Chattahoochee River, which is located east of the proposed project.

This project is part of the Envision 6 Regional Transportation Plan and the FY 2008 – 2013 Transportation Improvement Program as CO-AR-070.

Deficiencies in the System

Existing Atlanta Road is a five-lane facility from the Cobb/Fulton County line north to the I-285 interchange. West of the I-285 interchange, Atlanta Road is a four-lane divided facility with a variable width median. Due to recent construction improvements to the East-West Connector and Cumberland Parkway and a large boom in residential construction along the East-West Connector and Atlanta Road, commuters are utilizing Atlanta Road to reach I-285 from the cities of Smyrna and Marietta and from south and west Cobb County via the East-West Connector. Existing average daily traffic (ADT) along Atlanta Road is 50,440 vehicles per day (vpd) west of I-285 and 40,560 vpd east of I-285. In the design year (2032), these numbers are expected to increase to 65,280 vpd west of I-285 and to 50,780 vpd east of I-285. This constitutes an increase in traffic volume on Atlanta Road of approximately 29 percent west of I-285 and approximately 25 percent east of I-285.

The flow of traffic along Atlanta Road at I-285 is hindered by the existing urban diamond interchange. Currently, this interchange consists of twin bridges over I-285 with no provisions for left turns on to I-285 from either Atlanta Road approach. Drivers must queue in each of the leftmost through lanes, causing severe through lane backups in the peak hours. Currently, all four legs of the existing intersection experience excessively long delays during the p.m. peak hour because the capacity of the roadway has been exceeded. Without improvements, these delays would continue and worsen. By 2012, Atlanta Road would operate at level of service (LOS) D at the I-285 northbound ramps in the p.m. peak hour and LOS E at the I-285 southbound ramps and at Pine Street in the a.m. peak hour. By 2032, LOS would further decrease,

with Atlanta Road operating at LOS D at Pine Street in the p.m. peak hour and at the I-285 northbound ramps in the a.m. peak hour.

Table 1. No Build Peak Hour Intersection LOS

Intersection	LOS 2007 Existing		LOS 2012 No Build		LOS 2032 No Build	
	AM	PM	AM	PM	AM	PM
Atlanta Road at Pine Street (signalized)	B	C	E	C	E	D
Atlanta Road at I-285 SB Ramps (signalized)	C	C	E	B	E	B
Atlanta Road at I-285 NB Ramps (signalized)	D	C	C	D	D	D
Atlanta Road at Brownwood Lane (signalized)	B	B	B	B	B	B

LOS information was not calculated for Atlanta Road at N. Church Lane; however, based on existing and future projected traffic volumes, this intersection operates (and will continue to operate) at a LOS C or better.
Note: the perceived improvement in LOS at the SB Ramps from 2007 PM to 2012 & 2032 PM occurs because the increase in system traffic has resulted in queues and delays occurring north of these intersections resulting in less traffic being able to arrive at these ramp intersections. These queues and delays result in less throughput for the intersections providing traffic to the ramp intersections, therefore an "improved" intersection LOS.

Table 2. No Build Peak Hour Roadway LOS

Roadway	LOS 2007 Existing		LOS 2012 No Build		LOS 2032 No Build	
	AM	PM	AM	PM	AM	PM
I-285 Northbound between Atlanta Road and Paces Ferry Road	E	C	E	C	F	D
I-285 Southbound between Paces Ferry Road and Atlanta Road	D	D	E	F	E	F

Table 3. No Build Peak Hour Roadway Volumes

Direction	2007		2012		2032	
	AM	PM	AM	PM	AM	PM
I-285 NB	8245	5326	8360	5550	9380	6590
I-285 SB	7106	7709	7360	8230	7270	8340

I-285 roadway volumes taken between Atlanta Road and Paces Ferry Road for both northbound and southbound directions.

The at-grade intersection analysis revealed that as traffic conditions worsen by the year 2032, the existing conditions would not meet the demand for vehicles within the study corridor. Traffic at each of the interstate ramp locations with Atlanta Road is affected by the operation of intersections upstream, towards Cumberland Parkway. Specifically, during the a.m. peak hour without the construction of the proposed project, Atlanta Road at Cumberland Parkway operates at LOS F, Atlanta Road at West Atlanta Road operates at LOS F and Atlanta Road at Pine Street operates at LOS E.

There are freeway sections along I-285, between South Cobb Drive and Paces Ferry Road, that can be expected to operate at an inadequate LOS for the years 2012 and 2032 for the No Build alternative. Without the construction of the proposed project, I-285 can be expected to experience excessive delay during the a.m. peak hour traveling northbound as vehicles from Atlanta Road merge onto the interstate's northbound travel lanes in the year 2012. During the 2012 p.m. peak hour, without the construction of the proposed project, I-285 becomes congested traveling southbound beginning at the Paces Ferry Road exit ramp and ending just north of the diverge section of I-285 at the Atlanta Road interchange.

As traffic conditions worsen for the year 2032, without the construction of the proposed auxiliary lanes, the merge sections along I-285 northbound at the Atlanta Road and Paces Ferry Road interchanges operate at LOS F during the a.m. peak hour. Additionally, the basic freeway section and diverge section of I-285 southbound, north of Paces Ferry Road operates at LOS F, during the same peak period. However, the p.m. peak hour is expected to operate at LOS F traveling southbound along I-285 north of Paces Ferry Road to the Atlanta Road exit ramp. I-285 northbound travel at the merge section located at Paces Ferry Road is also expected to operate at LOS F during the p.m. peak hour without the construction of the proposed project.

Crash Data

The improvements proposed for the interchange would also work to reduce crash frequency at each intersection by providing exclusive left turn bays from Atlanta Road to the I-285 northbound and southbound entrance ramps. A total of 344 crashes occurred on Atlanta Road within the project limits from 2006 through 2008, of which 184 were a result of rear end crashes and 145 were a result of sideswipe or angle crashes. The majority of these crashes occurred between the I-285 interchange ramps and Cumberland Parkway. The proposed improvements would help alleviate these crashes with the addition of the left turn bays by removing the turning vehicles from the through lanes. The crash rates on Atlanta Road between North Church Lane and Pine Street were higher than the statewide average for urban minor arterials in 2006, 2007, and 2008, and the injury rates for this same segment of Atlanta Road were higher than the statewide average in 2007 and 2008. No fatalities occurred in this area in the years 2006 – 2008.

Table 4. Crash Data – Atlanta Road from N. Church Lane to Pine Street

	2006		2007		2008	
	Atlanta Road	Statewide	Atlanta Road	Statewide	Atlanta Road	Statewide
Crashes	104		121		119	
Crash Rate*	1110	531	1381	514	1326	471
Injuries	18		37		18	
Injury Rate*	192	201	422	190	201	176

* Rate per 100 million vehicle miles.

Logical Termini

The eastern terminus of the proposed project is N. Church Lane and the western terminus of the proposed project is Pine Street. Pine Street at Atlanta Road is the eastern terminus of the recently completed East West Connector/Cumberland Parkway widening project. Under this project, Atlanta Road was widened to a six lane section (3 lanes in each direction) between Pine Street and Cumberland Parkway. Thus, the western terminus of Pine Street is logical as the proposed project would tie-in to the existing six lane section along Atlanta Road at this point. The eastern terminus of N. Church Lane is logical because there is a significant traffic volume decrease east of the Atlanta Road at I-285 interchange as almost one-fourth of the vehicles traveling eastbound on Atlanta Road utilizes I-285 north or southbound rather than continuing east on Atlanta Road. Existing average daily traffic (ADT) along Atlanta Road is 50,440 vpd west of the Atlanta Road at I-285 interchange and is 40,560 vpd east of the interchange. This constitutes an approximate 20 percent drop in traffic volumes. The project extends to N. Church Lane in order to tie-in with the existing five lane section of Atlanta Road east of I-285.

The southern and northern terminus of the proposed project are determined by the length of the southern entrance and exit ramps for I-285 at Atlanta Road interchange and the southern entrance and exit ramps for I-285 at Paces Ferry Road interchange, respectively.

Table 5. Existing (2007) Peak Hour Turning Movements
Atlanta Road at I-285 and Project Termini

Roadway	Volume		Thru		%		Pine Street		%		Brownwood Lane		%	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Atlanta Road EB at Pine Street	1802	910	1732	774	96.1	85.1	60*	136	3.3*	14.9	-	-	-	-
Atlanta Road WB at Pine Street	710	2163	636	1983	89.6	91.7	70*	179*	9.9*	8.3*	-	-	-	-
Atlanta Road EB at Brownwood Ln.	1565	976	1367	825	87.3	84.5	-	-	-	-	186**	146**	11.9**	15**
Atlanta Road WB at Brownwood Lane	710	1384	684	1356	96.3	98	-	-	-	-	22**	28	3.1**	2
Roadway	**Volume**		**Thru**		**%**		**I-285 SB**		**%**		**I-285 NB**		**%**	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Atlanta Road EB west of I-285	899	1577	473	1213	52.6	76.9	426	364	47.4	23.1	-	-	-	-
Atlanta Road EB between I-285 Ramps	706	1583	550	1399	77.9	88.4	-	-	-	-	156	184	22.1	11.6
Atlanta Road WB east of I-285	2284	869	1833	652	80.3	75	-	-	-	-	451	217	19.7	25
Atlanta Road WB between I-285 ramps	2149	1029	1393	771	64.8	74.9	756	258	35.2	25.1	-	-	-	-

* From Atlanta Road EB, 10 vehicles (0.6%) turn into a business complex located directly across Atlanta Road from Pine Street in the a.m. peak hour. From Atlanta Road WB, 4 vehicles (0.5%) turn into this same complex in the a.m. peak hour. In the p.m. peak hour, from Atlanta Road WB, one vehicle (<0.1%) turns into the business complex.
**From Atlanta Road EB, 12 vehicles (0.8%) turn into the Pilot station located directly across Atlanta Road from Brownwood Lane in the a.m. peak hour. From Atlanta Road WB, 4 vehicles (0.6%) turn into the Pilot station in the a.m. peak hour. In the p.m. peak hour, from Atlanta Road EB, 5 vehicles (0.5%) turn into the Pilot Station.

Existing and Future Land Use

Cobb County currently has no official existing land use map; however, the county's current zoning map and a visual reconnaissance of the project corridor confirms that little undeveloped land is located in the project area. Developed land consists of a mixture of residential, commercial, office and institutional, and mixed-use. One vacant parcel located immediately within the project area is located at the northeast corner of Atlanta Road and I-285. According to the property owner, the land is currently for sale and is in negotiation with a buyer.

According to the Cobb County 2030 Comprehensive Plan, the rapid growth Cobb County experienced in the 1980s and 1990s has subsided in parts of the County; however, the County as a whole is still experiencing growth at a relatively rapid pace compared to national trends. Cobb County has changed from a bedroom community to the City of Atlanta to a major employment center. This evolution is expected to continue.

According to the future land use map for the county, the Atlanta Road corridor is located in a community activity center (CAC). The purpose of the CAC category is to provide for areas that can meet the immediate needs of several neighborhoods or communities. They should primarily be located near the intersection of a freeway interchange and arterial road or the intersection of two arterials. Retail uses are encouraged where direct access to the arterial is available and where safe turning movements are possible. Inter-parcel access is encouraged.

Planning in and around the project area is heavily reliant on transportation infrastructure to encourage and sustain residential and commercial growth. The project area is heavily developed and will continue to evolve to meet the needs of the surrounding residential neighborhoods. Regardless of the proposed project improvements, the area will see growth. It is the goal of the County to ensure that transportation improvements are in place to promote and sustain growth in this area. The project area is one that has rapidly changed in the last several years. Without the interchange improvements at Atlanta Road and I-285, as well as the improvements to I-285, the area would not meet the goals of the County's Comprehensive Plan. Having sufficient infrastructure in place to encourage growth and provide adequate accessibility to the area's commercial and residential land uses is essential; regardless of the improvements, growth in this area has and will continue to take place.

Summary

The area surrounding the project corridor will continue to experience growth with or without the proposed project. Under the existing configuration, by 2012, Atlanta Road would operate at unacceptable LOS (D or worse) at the I-285 northbound (a.m. peak hour) and southbound ramps (p.m. peak hour) and Pine Street (p.m. peak hour). By 2032, LOS would decrease, with Atlanta Road operating at unacceptable LOS (D or worse) at Pine Street (a.m. and p.m. peak hour) and the I-285 northbound (a.m. and p.m. peak hour) and southbound (a.m. peak hour) ramps. The proposed improvements would meet the need and purpose of the project as they would address the operational deficiencies of the interchange, alleviate traffic congestion,

improve the overall characteristics of the interchange and the adjacent at-grade intersections, and reduce driver delays.

Project description

The preferred alternative would modify the existing interchange at I-285 and Atlanta Road and would begin just west of the intersection of Atlanta Road and N. Church Lane and end at the intersection of Atlanta Road and Pine Street. The proposed improvements include replacing the existing twin bridges with a single, four-span bridge at approximately the same location. The spans of this bridge would be built to accommodate the future expansion of I-285, the typical section of which assumes 10 lanes of single occupancy vehicles (SOV) (5 in each direction) on the inside and 10 lanes of Collector-Distributor roads (5 in each direction) on the outside (see the attached typical sections, Attachment 2, for more details). A double left-turn bay is proposed for Atlanta Road eastbound to the I-285 northbound entrance ramp. The northbound entrance ramp would be realigned and modified from a single lane ramp to a two lane ramp to accommodate the left turns. A single left-turn bay is proposed for Atlanta Road westbound to the I-285 southbound entrance ramp. The southbound entrance ramp would be widened to allow for two lanes before merging to a single lane at the I-285 entrance gore. The I-285 southbound exit ramp would also be widened to accommodate dual left-turn and dual right-turn movements at the termini.

Additional improvements to Atlanta Road include the construction of a deceleration lane on Atlanta Road westbound from east of the interchange to the I-285 northbound entrance ramp, and the construction of a third lane on Atlanta Road westbound to be added as a free flow right-turn lane from the I-285 southbound off ramp to Pine Street. A short segment of Log Cabin Road would require realignment as a result of the deceleration lane. The proposed lane widths would be 12 feet with 12 foot urban shoulders that include a 5 foot sidewalk. Furthermore, a dual left-turn lane would be provided from Atlanta Road to Pine Street in order to accommodate vehicles entering the West Village development from Atlanta Road westbound.

Improvements to I-285 are also included. An auxiliary lane would be added to I-285 southbound and northbound between Atlanta Road and Paces Ferry Road. The northbound auxiliary lane would begin after the merging of the two entrance ramps from Atlanta Road and would end as a two lane exit ramp to Paces Ferry Road. The southbound auxiliary lane would begin as a two lane entrance ramp from Paces Ferry Road and would end as a two lane exit ramp to Atlanta Road. To accommodate these proposed auxiliary lanes, the existing Orchard Road (CR 1921) bridge over I-285 would need to be reconstructed at its present location. The Orchard Road bridge spans will be built to accommodate the I-285 SOV expansion only. This was a Value Engineering concession, since this design offers an initial cost savings and the Orchard Road bridge would need to be closed to traffic during any I-285 improvements.

Bicycle lanes do not currently exist along Atlanta Road within or immediately to the east and west of the project corridor. However, it should be noted that Atlanta Road is currently part of the State's March to the Sea bicycle route. Bicycle lanes were evaluated for the project corridor and determined to be feasible on Atlanta Road from Pine Street to Brownwood Lane since these were logical termination points based on the proposed improvements.

This project is located 100 percent in Cobb County in the 6th & 13th Congressional Districts and Ga. Militia District 1568. The proposed project will begin at I-285 milepost 2.33 and extend approximately 1.77 miles to I-285 milepost 4.10. The northern terminus of the project is determined by the I-285 at Paces Ferry Road Interchange entrance and exit ramps. The southern terminus is determined by the length of the NB I-285 exit ramp. The western project terminus is the Atlanta Road intersection with Pine Street (milepost 2.55), also known as the southern terminus of the East-West Connector/Cumberland Pkwy widening project. The eastern terminus is the just west of the Atlanta Road intersection with N. Church Lane at the terminus of the Cobb County N. Church Lane bridge project (Cobb County Project #D1260) at milepost 1.98 for a total distance along Atlanta Road of 0.57 miles.

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

Is this project located in an Ozone Non-attainment area? ___X___Yes_____No
The proposed project concept matches the conforming plan's model description. The proposed changes are scheduled to be open to traffic in 2015.

PDP Classification: Major ☒, Minor ☐

Federal Oversight: Full Oversight ☒, Exempt ☐, State Funded ☐, or Others ☐

Functional Classification: Urban Interstate Principal Arterial (I-285)/Urban Minor Arterial Street (CR 4519)

U. S. Route Number(s): I-285 **State Route Number(s):** SR 407

County Route Number(s): CR 4519

Traffic (AADT):

	Base Year (2012)		Design Year (2032)	
Location	**Volume**	**% Truck**	**Volume**	**% Truck**
I-285, North of Atlanta Rd	197,500	25%	260,200	25%
I-285, South of Atlanta Rd	184,900	25%	241,420	25%
Atlanta Rd, West of I-285	50,440	9.4%	65,280	11.0%
Atlanta Rd, East of I-285	40,560	8.3%	50,780	9.0%
I-285 SB Exit Ramp	13,620	-----	19,430	-----
I-285 NB Entrance Ramp	13,620	-----	19,430	-----
I-285 NB Exit Ramp	7,320	-----	10,040	-----
I-285 SB Entrance Ramp	7,320	-----	10,040	-----

Existing Design Features:

- Typical Section: The interchange ramps are one to four lane sections consisting of 12' travel lanes, 12' turn lanes, variable width shoulders and side ditches. I-285 is an eight lane section with 12' travel lanes, 6'-9" inside shoulders, 10' outside shoulders and an 18' median with a jersey barrier.

Atlanta Road is a five-lane section, east of I-285 with 12' travel lanes and curb & gutter. Atlanta Road west of I-285 is a four-lane divided section with 12' travel lanes and a variable width raised median. The Atlanta Rd NBL & SBL bridges have 2 – 12' travels lanes (one way), 2' gutter widths, 4' inside shoulder, 5' outside sidewalk. The Orchard Road Bridge has 2 – 12' lane (bidirectional), 1.5' gutter widths and 5' sidewalk widths.

- Posted Speed Mainline (I-285): 55 mph Mainline (Atlanta Rd.): 45 mph Ramps: No Speed Posted
- Minimum radius for curve; Interstate: 3820' Atlanta Rd.: 1000'
- Maximum super-elevation rate for curve; Interstate: 0.04 Atlanta Rd.: 0.04
- Maximum Grade: 3.0% (Interstate & Ramps) 3.1 % (Atlanta Rd.)
- Width of right of way: 300' (Interstate) Varies (Approx. 80'-240') (Atlanta Rd.)
- Major structures: 318' x 36' bridge on Atlanta Rd. SBL over I-285 with a sufficiency rating of 53.52 (Structure ID: 067-0003-0); 318' x 36' bridge on Atlanta Rd. NBL over I-285 with a sufficiency rating of 54.62 (Structure ID: 067-0002-0); 257' x 36' bridge on Orchard Rd. over I-285 with a sufficiency rating of 70.77 (Structure ID: 067-0127-0); 134' x 131' (varies) bridge on I-285 over CSX railroad with a sufficiency rating of 76.00 (Structure ID: 067-0097-0); 373'x 80' bridge on Cumberland Pkwy/Young St. Ext. over I-285 with a sufficiency rating of 99.05 (Structure ID: 067-5220-0).
- Major interchanges or intersections along the project: Interchanges – Atlanta Road at I-285; Paces Ferry Road at I-285; Intersections – Brownwood Lane & Atlanta Rd; I-285 NB ramps & Atlanta Road; I-285 SB ramps & Atlanta Rd; Pine Street & Atlanta Road (median opening)
- Existing length of roadway segment and the beginning mile logs for each county segment. Project begins at ML 2.33 and extends north approximately 1.77 miles to ML 4.10 along I-285. The Atlanta Road segment begins at ML 1.98 and extends 0.57 miles northwest to ML 2.55. The entire project is in Cobb County.

Proposed Design Features:

- Proposed typical section(s):
  - Atlanta Road: west of I-285 - An urban section with 12' shoulders including curb & gutter and a 5' sidewalk, 3-12' lanes and 4' bike lanes in each direction separated by a variable width (20' minimum, 44' maximum) raised median. East of I-285 - An urban section with 12' shoulders including curb & gutter and a 5' sidewalk, 2-12' lanes and 4' bike lanes in each direction separated by a variable-width raised median. The bridge section accommodates 7–12' lanes, 8' raised median, 2–4' bike lanes, 2' gutter widths and 5'-6" sidewalks
  - I-285: Widen existing section to accommodate an additional 12' auxiliary lane in each direction. Maintain existing 6'-9" inside shoulder width. Outside shoulders to be constructed 14' wide (12' paved) with 6:1 front slopes to the 38' clear zone. The Atlanta Road bridge is designed to accommodate future I-285 lane configurations, including 5-12' general purpose lanes and a 5 lane collector-distributor section in each direction with 12' wide shoulders.
  - Orchard Road: An urban section with 12' shoulders including curb & gutter and a 5' sidewalk, 1-12' lane in each direction, no median. The bridge section accommodates 2-12' lanes, 2' gutters and 5'-6" sidewalks.
  - Ramps: Proposed ramps will be one to four lane sections with 12' to 16' travel lanes, 6' inside shoulders (4' paved, 2' grassed), 12' outside shoulders (10' paved, 2' grassed) and side ditches.
- Proposed Design Speed I-285: 65 mph Atlanta Rd.: 45 mph Ramps: 45 mph
- Proposed Maximum grade I-285 3% Maximum grade allowable 4 %

- Proposed Maximum grade Atlanta Rd. 6% Maximum grade allowable 8 %
- Proposed Maximum grade Ramps 6% Maximum grade allowable 6 %
- Proposed Maximum grade driveway 11%
- Proposed Minimum radius of curve 3819.7' Minimum radius allowable 1660' - I-285 (65 mph)
- Proposed Minimum radius of curve 1153.29' Minimum radius allowable 711' - Atlanta Rd.(45 mph)
- Proposed Minimum radius of curve 600' Minimum radius allowable 587' - Ramps (45 mph, 0.08 SE)
- Proposed maximum super-elevation rate for curve: Match existing (I-285) 0.08 (Ramps) 0.036 (Atlanta Rd.) Maximum allowable super-elevation rate for curve: 0.06 (I-285) 0.08 (Ramps) 0.04 (Atlanta Rd.)
- Right of way
  - Width: 300' (Interstate) Varies (Approx. 80'-240') (Atlanta Rd.)
  - Easements: Temporary ☐, Permanent ☒, Utility ☐, Others ☐
  - Type of access control: Full (Atlanta Rd*) ☒, (I-285) ☒;
    Partial ☐, By Permit (Atlanta Rd*) ☒, Others ☐, None ☐
    *Note: Atlanta Road will have full access control within the proposed interchange and 300 feet minimum, 600 feet preferred beyond the ramp termini with access control by permit only outside these offsets
  - Number of parcels 9 Number of displacements:
    - Business: 1
    - Residences: 0
    - Mobile Homes: 0
    - Other: 0

- Structures:
  - Bridges: 494' x 117'-5" concrete bridge for Atlanta Road over I-285; 190' x 41'-5" concrete bridge for Orchard Rd. over I-285
  - Retaining walls: 600' x 5' retaining wall along I-285 NB entrance ramp; 500' x 5' retaining wall along I-285 SB exit ramp; 325' x 15' retaining wall at Orchard Rd. bridge end bents.
  - Sound walls: approx. 12600' of sound barrier adjacent to NB & SB I-285 is anticipated, with heights varying from 8' to 30'
- Major intersections and interchanges: Interchanges – Atlanta Road at I-285; Paces Ferry Road at I-285; Intersections – Brownwood Lane & Atlanta Rd (median opening); I-285 NB ramps & Atlanta Road (median opening); I-285 SB ramps & Atlanta Rd (median opening); Pine Street & Atlanta Road (median opening)
- Transportation Management Plan Anticipated: Yes ☒ No ☐
  Traffic control during construction:
  - Maintain traffic on existing facilities during construction.
  - Staged construction with traffic shifts along Atlanta Road for construction of the bridge over I-285 (see Attachment 12).
    - Stage 1 – Shift traffic to the outside along existing bridges while removing a portion of the bridges on the inside for Stage 2.
    - Stage 2 – Maintain traffic on existing bridges while constructing a portion of the proposed bridge in the remaining space between the two existing structures.
    - Stage 3 – Shift eastbound traffic to the newly constructed bridge while maintaining westbound traffic on the existing bridge. Construct portion of new bridge to the south.

- Stage 4 – Shift westbound traffic onto the newly constructed bridge. Construct remaining portion of new bridge to the north.
- Orchard Road to be closed during construction of bridge over I-285

- Design Exceptions to controlling criteria anticipated:

	UNDETERMINED	YES	NO
HORIZONTAL ALIGNMENT:	☐	☐	☒
ROADWAY WIDTH:	☐	☐	☒
SHOULDER WIDTH: (Existing inside shoulder on I-285)	☐	☒	☐
VERTICAL GRADES:	☐	☐	☒
CROSS SLOPES:	☐	☐	☒
STOPPING SIGHT DISTANCE:	☐	☐	☒
SUPERELEVATION RATES:	☐	☐	☒
HORIZONTAL CLEARANCE	☐	☐	☒
SPEED DESIGN:	☐	☐	☒
VERTICAL CLEARANCE:	☐	☐	☒
BRIDGE WIDTH:	☐	☐	☒
BRIDGE STRUCTURAL CAPACITY:	☐	☐	☒

- Design Variances: Shoulder width (16' required, 12' provided along Atlanta Road)
- Environmental concerns: Civil War trenches in NE quadrant of Atlanta Rd interchange; Section 404 NWP 23, possible Stream Buffer Variance
- Anticipated level of environmental analysis:
  - Are Time Saving Procedures appropriate? Yes ☐, No ☒
  - Categorical Exclusion? Yes ☒, No ☐
  - Environmental Assessment/Finding of No Significant Impact (FONSI) Anticipated: Yes ☐, No ☒
  - Environmental Impact Statement (EIS): Yes ☐, No ☒
- Utility involvement: Coordination required with Atlanta Gas Light Co, Atlanta Gas Light Network, AT&T, Colonial Pipeline, Plantation Pipeline, Cobb County Water System, Cobb Marietta Water Authority, Comcast, Charter, Georgia Power, Media One, GDOT ATMS & Cobb County Traffic has been identified; SUE will be obtained to identify potential underground conflicts
- Value Engineering Study required: Yes ☒, No ☐ (VE Study held June 1-5, 2009)
- Benefit/Cost Ratio 2.94 (Hwy Operating Costs only); 29.09 (Hwy Cost & User Time Cost Savings

Project Cost Estimate and Funding Responsibilities:

	PE	ROW	UTILITY	CST*	MITIGATION
By Whom	Cobb DOT	Cobb DOT	Cobb DOT/GDOT	GDOT	N/A
$ Amount	$2M	$15.05M	$460,000	$27.4M	N/A

**CST Cost includes: Construction, Engineering & Inspection, Fuel Cost Adjustment and Asphalt Cement Cost Adjustment*

Project Activities Responsibilities:

- Design: Cobb DOT
- Right-of-Way Acquisition: Cobb DOT
- Right-of-Way funding (real property): Cobb DOT

- Relocation of Utilities: ___Cobb DOT/GDOT (within Interstate R/W)_____
- Letting to contract: _____GDOT_____
- Supervision of construction: __GDOT_____
- Providing material pits: __Contractor_____
- Providing detours: ___Contractor_____
- Environmental Studies/Documents/Permits: __Cobb DOT_____
- Environmental Mitigation: ___N/A_____

Coordination:

- Initial Concept Meeting Date 2/16/07
- Concept Meeting Date TBD
- PAR Meeting Date N/A
- FEMA, USCG, and/or TVA: N/A
- Public Involvement: Public Information Open House (PIOH) held 3/8/07 (See attached summary of comments – Attachment 7)
- Local government comments: Cobb County supports the project as described
- Other projects in area:
    - Atlanta Rd. sidewalks from Brownwood Lane to N. Church Lane (Cobb Co. Proj. D7120)
    - Paces Ferry Road ramp intersection project – Cumberland CID
    - AR-909B, Multi-County, Northwest Corridor Arterial Bus Rapid Transit (BRT) – Phase II from Cumberland Galleria Transfer Center to MARTA Arts Center Station in the City of Atlanta
    - CO-373: Atlanta Road Multi-Use Trail from Spring Road/Concord Road intersection to Ridge Road (programmed) would construct a 10-foot wide multi-use trail along the west side of Atlanta Road.
    - CO-AR-304, Cobb County, P.I. No. 0006048, Interchange Reconstruction, I-285 West at SR 280 (South Cobb Dr)
    - AR-H-302, Multi-County, P.I. No. 0003433, HOV Lanes, I-285 West from I-20W/Fulton to I-75N/Cobb.
    - CO-175A, Cobb County, P.I. No. 752760, Widening from 4 to 6 Lanes, SR 280 from SR 5 to SR 70
- Railroads: CSX
- Other coordination to date: Project Framework Agreement (Attachment 9a); Letter from Todd Long, GDOT Director of Planning, regarding GDOT's proposed responsibilities (attachment 9b); Coordination meeting between GDOT-OE, CCDOT & FHWA regarding CE, dated 4-23-07 (Attachment 9c); Meeting with GDOT to discuss Concept report & IMR, dated 4-2-08 (Attachment 9d); MOA letter from GDOT-OE to Cobb County, dated 8-29-09 (Attachment 9e); Meeting with GDOT & CCDOT regarding Project schedule & PFA, dated 3-22-10 (Attachment 9f)

Scheduling – Responsible Parties' Estimate

- Time to complete environmental process: 7 Months.
- Time to complete preliminary construction plans: 9 Months.
- Time to complete right of way plans: 2 Months.
- Time to complete the Section 404 Permit: 3 Months.
- Time to complete final construction plans: 20 Months.
- Time to complete to purchase right of way: 18 Months.
- List other major items that will affect the project schedule: None.

Alternates considered:

1) **Partial Cloverleaf Interchange (Alternates 1 & 1a)** - Alternate 1 included a partial cloverleaf (Par Clo) with Atlanta Road eastbound to I-285 northbound movement at a single intersection with the I-285 northbound exit ramp and the Atlanta Road westbound to I-285 northbound movement occurring at the northbound loop ramp intersection. Alternate 1a included a Par Clo interchange configuration with Atlanta Road eastbound to I-285 northbound movement separated as a single movement beginning the northbound loop ramp and the Atlanta Road westbound to I-285 northbound movement occurring at the northbound loop ramp intersection. These alternates are not preferred because the Atlanta Rd. WB to I-285 NB signalized left turn movement does not operate at an efficient LOS as the tight urban diamond alternate, which allows the signals along Atlanta Road at the ramps to be coordinated.
2) **Partial Cloverleaf Interchange (Alternate 2)** - Relocate existing NB off-ramp from I-285 to Atlanta Road to the east; Add 2-lane loop ramp connecting Atlanta Road EB to I-285 NB; Add 3rd lane on Atlanta Road EB from west of the interchange to be dropped at the loop ramp; Add 3rd lane on Atlanta Road WB to be added as a free-flow right lane from I-285 SB off-ramp; Improve left-turn bay on Atlanta Road WB to I-285 SB ramp; Add deceleration lane to Atlanta Road WB to I-285 NB entrance ramp; Add 5th auxiliary lane to SB and NB I-285 between Atlanta Road and Paces Ferry Road. This alternate is not preferred because the northbound ramp intersection does not operate at an efficient LOS as the tight urban diamond alternate, which allows the signals along Atlanta Road at the ramps to be coordinated. Also, this alternate has the greatest impact to the adjacent properties as a result of the loop ramp.
3) **Diamond Interchange (Alternate 3)** - Add double left-turn bay on Atlanta Road EB to I-285 NB ramp; Widen existing NB on-ramp to accommodate double left-turn bay; Add 3rd lane on Atlanta Road EB from west of the interchange to be dropped at the double left-turn bay; Add 3rd lane on Atlanta Road WB to be added as a free-flow right lane from I-285 SB off-ramp; Improve left-turn bay on Atlanta Road WB to I-285 SB ramp; Add deceleration lane to Atlanta Road WB to I-285 NB entrance ramp; Add 5th auxiliary lane to SB and NB I-285 between Atlanta Road and Paces Ferry Road. This alternate is not preferred because the important Atlanta Rd. EB to I-285 NB signalized left turn movement does not operate at as an efficient LOS as the tight urban diamond alternative, which allows the signals along Atlanta Road at the ramps to be coordinated.
4) **Tight Urban Diamond Interchange (Alternate 4 - Preferred)** - Add double left-turn bay on Atlanta Road EB to I-285 NB ramp; Widen existing NB on-ramp to accommodate double left-turn bay; Add 3rd lane on Atlanta Road EB from west of the interchange to be dropped at the double left-turn bay; Add 3rd lane on Atlanta Road WB to be added as a free-flow right lane from I-285 SB off-ramp; Improve left-turn bay on Atlanta Road WB to I-285 SB ramp; Add deceleration lane to Atlanta Road WB to I-285 NB entrance ramp; Add 5th auxiliary lane to SB and NB I-285 between Atlanta Road and Paces Ferry Road. Ramps to and from I-285 to be separated from interstate by a series of walls. Signals along Atlanta Road at ramps to be coordinated. This alternate was selected

because it has the least impact to adjacent properties and provides the greatest improvement to traffic flow at the interchange since it is the only alternative which provides acceptable future (2032) intersection LOS for both the a.m. and p.m. peak hours.

5) **No Build** – eliminated due to LOS F for future traffic.

Selection of Preferred Alternative:
The LOS for the I-285 ramp termini intersections on Atlanta Road for each of the alternate improvement concepts for the future year (2030) are shown in Table 3.1 below. As shown, all the improvement concepts improve the future (2030) intersection LOS to D or better for both the a.m. and p.m. peak hours.

Table 3.1
Alternate Concept 2030 Levels of Service
South Atlanta Road/I-285 Ramp Intersections

Alternate	Southbound Ramp Intersection		Northbound Ramp Intersection	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
No Build	E	F	F	F
Alternate 1	B	B	D	C
Alternate 1a	B	B	D	D
Alternate 2	B	B	D	C
Alternate 3	C	B	D	C
Alternate 4	C	B	C	C

Tables 3.2 to 3.13 in Attachment 4(c) show the freeway LOS for the sections of I-285 between South Cobb Drive and Paces Ferry Road for the No Build alternate and each of the alternate improvement concepts for the future (2030) a.m. and p.m. peak hours from the I-285/Atlanta Road Interchange Study. The LOS are shown for the merge/diverge, weaving and basic freeway sections of the freeway system in the study area. As can be seen from this information the interchange improvements have minor impact on the freeway operations in the a.m. peak hour. In the p.m. peak hour the southbound section of I-285 between Paces Ferry Road and Atlanta Road is improved from LOS F to LOS E with the exception of Alternate 1 and Alternate 1a which exhibit a LOS F for the weaving movement with a density of 45.8 vehicles/lane/mile compared to a maximum of 43.0 vehicles/lane/mile for LOS E operation. Alternates 2, 3 and 4 improve the operation of this southbound section of I-285 from LOS F without improvements to LOS E with the improvements.

Based upon these evaluations, in conjunction with input from the Value Engineering Study, it was concluded that Alternate 4 would be the preferred alternate. It was believed that Alternate 4 would provide the most flexibility in meeting the travel demands of the area, especially in light of the changing character and intensity of the development within the study area.

Programmed Dates:

- Right of Way: 2011
- Construction: 2013

Comments: None

Attachments:

1. Cost Estimates; (a) Construction, including E&~~C~~I; (b) Right of Way; (c) Utilities; (d) Fuel/Asphalt price adjustment form
2. Typical Sections (3)
3. Traffic Diagrams
4. Capacity Analysis; (a) CORSIM and (b) LOS Graphics and (c) Alternatives analysis
5. Accident Summaries
6. Minutes of Initial Concept Team Meeting
7. Summary of Comments Received during Public Comment Period
8. Bridge Inventory Sheets (5 bridges)
9. Additional Coordination; (a) Project Framework Agreement; (b) Todd Long Letter; (c) Meeting Minutes 4-23-07; (d) Meeting Minutes 4-2-08; (e) MOA letter 8-26-09; (f) Meeting Minutes 3-22-10
10. Conforming plan's network schematics showing thru lanes (for non-attainment areas only)
11. 11" x 17" Concept Layout Sheet
12. Bridge Construction Staging
13. Benefit Cost Analysis
14. Implementation of Value Engineering Study Alternatives

Concur: _____
Director of Engineering

* Approve: _____ 10/8/2010
for Division Administrator, FHWA

Approve: _____ Date: 10/15/2010
Chief Engineer

* See letter dated 10/9/2010 for comment regarding bicycle lanes.

U.S. Department
of Transportation
**Federal Highway
Administration**

Georgia Division

61 Forsyth Street S.W.
Atlanta, Georgia 30303
404-562-3630
404-562-3703
GA.fhwa@dot.gov

October 9, 2010

In Reply Refer To:
HPE-GA

Mr. Vance C. Smith, Commissioner
Georgia Department of Transportation
One Georgia Center
600 West Peachtree
Atlanta, GA 30308

Dear Mr. Smith:

The Concept Report for the proposed interchange modifications to the I-285 at South Atlanta Road interchange in Cobb County listed as GDOT project STP00-0222-01(001) has been reviewed.

We agree with the concept as presented with one comment. Please ensure that the bicycle lanes included in this project are consistent with other adjacent bicycle facilities that this project would connect to.

If you have any questions regarding these comments please contact Melinda Roberson at (404)562-3652.

Sincerely,

for Rodney N. Barry, P.E.
Division Administrator

Cc: Chandria Brown, GDOT Office of Program Delivery

RECOVERY.GOV

Attachment 1a

Construction Cost Estimate

Estimate Report for file "Atlanta Rd TUDI 2010 Rev_2010-03-18"

Roadway

Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	Lump Sum	$2,000,000.00	Traffic Control - Atlanta Rd	$2,000,000.00
153-1300	1	EA	$64,468.69	FIELD ENGINEERS OFFICE TP 3	$64,468.69
201-1500	1	Lump Sum	$2,000,000.00	Clearing & Grubbing - Atlanta Rd	$2,000,000.00
205-0001	100000	CY	$6.00	UNCLASS EXCAV	$600,000.00
206-0002	110000	CY	$7.00	BORROW EXCAV, INCL MATL	$770,000.00
310-5100	50000	SY	$13.39	GR AGGR BASE CRS, 10 INCH, INCL MATL	$669,500.00
402-1812	1150	TN	$59.39	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	$68,298.50
402-3121	2900	TN	$54.73	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM	$158,717.00
402-3130	2000	TN	$60.09	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM	$120,180.00
402-3190	8600	TN	$57.86	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM	$497,596.00
413-1000	3020	GL	$1.74	BITUM TACK COAT	$5,254.80
430-0820	29000	SY	$110.00	CONT REINF CONC PVMT, CL 1 CONC, 12 IN THK	$3,190,000.00
433-1200	1280	SY	$133.25	REINF CONC APPROACH SLAB, INCL SLOPED EDGE	$170,560.00
439-0026	19900	SY	$63.76	PLAIN PC CONC PVMT, CL 3 CONC, 12 INCH THK	$1,268,824.00
441-0104	2800	SY	$23.59	CONC SIDEWALK, 4 IN	$66,052.00
441-0204	2000	SY	$24.72	PLAIN CONC DITCH PAVING, 4 IN	$49,440.00
441-3999	3000	LF	$15.50	CONCRETE V GUTTER	$46,500.00
441-6222	4200	LF	$11.71	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	$49,182.00
441-6740	2800	LF	$10.66	CONC CURB & GUTTER, 8 IN X 30 IN, TP 7	$29,848.00
446-2118	20000	LF	$4.10	HIGH STRENGTH PVMT REINF FABRIC, 18 IN WIDTH	$82,000.00
500-3101	50	CY	$362.53	CLASS A CONCRETE	$18,126.50
550-1180	4000	LF	$29.16	STORM DRAIN PIPE, 18 IN, H 1-10	$116,640.00
550-1240	1500	LF	$35.55	STORM DRAIN PIPE, 24 IN, H 1-10	$53,325.00
550-1360	400	LF	$50.07	STORM DRAIN PIPE, 36 IN, H 1-10	$20,028.00
550-3318	14	EA	$616.83	SAFETY END SECTION 18 IN, STORM DRAIN, 4:1 SLOPE	$8,635.62
550-3324	8	EA	$746.15	SAFETY END SECTION 24 IN, STORM DRAIN, 4:1 SLOPE	$5,969.20
550-3536	4	EA	$1,585.33	SAFETY END SECTION 36 IN, STORM DRAIN, 6:1 SLOPE	$6,341.32
550-4218	14	EA	$447.41	FLARED END SECTION 18 IN, STORM DRAIN	$6,263.74
550-4224	8	EA	$546.28	FLARED END SECTION 24 IN, STORM DRAIN	$4,370.24
550-4236	4	EA	$933.77	FLARED END SECTION 36 IN, STORM DRAIN	$3,735.08
573-2006	4800	LF	$9.04	UNDDR PIPE INCL DRAINAGE AGGR, 6 IN	$43,392.00
634-1200	50	EA	$85.57	RIGHT OF WAY MARKERS	$4,278.50
641-1100	90	LF	$41.30	GUARDRAIL, TP T	$3,717.00
641-1200	3600	LF	$14.52	GUARDRAIL, TP W	$52,272.00
641-5001	8	EA	$628.02	GUARDRAIL ANCHORAGE, TP 1	$5,024.16
641-5012	8	EA	$2,225.97	GUARDRAIL ANCHORAGE, TP 12	$17,807.76
668-1100	40	EA	$2,108.92	CATCH BASIN, GP 1	$84,356.80
668-2100	10	EA	$1,820.74	DROP INLET, GP 1	$18,207.40
				Subtotal:	**$12,378,911.31**

Temp. Erosion Control

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	15	AC	$283.12	TEMPORARY GRASSING	$4,246.80
163-0240	500	TN	$140.83	MULCH	$70,415.00
163-0300	4	EA	$929.07	CONSTRUCTION EXIT	$3,716.28
163-0529	5000	LF	$2.93	CONSTRUCT AND REMOVE TEMPORARY SEDIMENT BARRIER OR BALED STRAW CHECK DAM	$14,650.00
163-0550	40	EA	$144.68	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	$5,787.20
165-0010	3400	LF	$0.43	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	$1,462.00
165-0030	3400	LF	$0.63	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	$2,142.00
165-0071	2500	LF	$0.94	MAINTENANCE OF SEDIMENT BARRIER - BALED STRAW	$2,350.00
165-0101	2	EA	$426.77	MAINTENANCE OF CONSTRUCTION EXIT	$853.54
165-0105	20	EA	$52.56	MAINTENANCE OF INLET SEDIMENT TRAP	$1,051.20
167-1000	2	EA	$398.13	WATER QUALITY MONITORING AND SAMPLING	$796.26
167-1500	24	MO	$506.81	WATER QUALITY INSPECTIONS	$12,163.44
171-0010	7500	LF	$1.32	TEMPORARY SILT FENCE, TYPE A	$9,900.00
171-0030	7500	LF	$2.66	TEMPORARY SILT FENCE, TYPE C	$19,950.00
				Subtotal:	**$149,483.72**

Permanent Erosion Control

Item Number	Quantity	Units	Unit Price	Item Description	Cost
603-2018	500	SY	$33.69	STN DUMPED RIP RAP, TP 1, 18 IN	$16,845.00
603-7000	500	SY	$3.31	PLASTIC FILTER FABRIC	$1,655.00
700-6910	25	AC	$661.11	PERMANENT GRASSING	$16,527.75
700-7000	75	TN	$53.27	AGRICULTURAL LIME	$3,995.25
700-7010	70	GL	$16.21	LIQUID LIME	$1,134.70
700-8000	20	TN	$349.47	FERTILIZER MIXED GRADE	$6,989.40
700-8100	1500	LB	$2.22	FERTILIZER NITROGEN CONTENT	$3,330.00
716-2000	10000	SY	$0.94	EROSION CONTROL MATS, SLOPES	$9,400.00
				Subtotal:	**$59,877.10**

Signing, Marking

Item Number	Quantity	Units	Unit Price	Item Description	Cost
631-2463	2	EA	$140,000.00	LED PIXEL CMS, WALK-IN, 3 X 21, 18 IN, TYPE B	$280,000.00
636-1033	100	SF	$18.14	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	$1,814.00
636-2070	200	LF	$6.91	GALV STEEL POSTS, TP 7	$1,382.00
636-5010	10	EA	$91.41	DELINEATOR, TP 1	$914.10
638-1001	1	LS	$150,000.00	STR SUPPORT FOR OVERHEAD SIGN, TP I , STA - (2 Structures)	$150,000.00
639-2002	250	LF	$4.06	STEEL WIRE STRAND CABLE, 3/8 IN	$1,015.00
639-4004	2	EA	$5,379.55	STRAIN POLE, TP IV	$10,759.10
653-0120	10	EA	$68.28	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	$682.80
653-0210	4	EA	$105.60	THERMOPLASTIC PVMT MARKING, WORD, TP 1	$422.40
653-1501	34100	LF	$0.31	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	$10,571.00
653-1502	6000	LF	$0.33	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	$1,980.00
653-1704	200	LF	$3.59	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	$718.00
653-3501	19000	GLF	$0.22	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	$4,180.00
653-3502	1500	GLF	$0.25	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, YELLOW	$375.00
653-6004	600	SY	$2.53	THERMOPLASTIC TRAF STRIPING, WHITE	$1,518.00
653-6006	220	SY	$2.58	THERMOPLASTIC TRAF STRIPING, YELLOW	$567.60
654-1003	100	EA	$3.29	RAISED PVMT MARKERS TP 3	$329.00
935-1116	2000	LF	$10.00	OUTSIDE PLANT FIBER OPTIC CABLE, LOOSE TUBE, SINGLE MODE, 72 FIBER	$20,000.00
				Subtotal:	**$487,228.00**

Signals

Item Number	Quantity	Units	Unit Price	Item Description	Cost
647-1000	3	LS	$150,000.00	TRAFFIC SIGNAL INSTALLATION NO -	$450,000.00
				Subtotal:	**$450,000.00**

Major Structures

Item Number	Quantity	Units	Unit Price	Item Description	Cost
500-xxxx	7870	SF	$90.00	Bridge No. 2 - Orchard Rd over I-285 (4 span)	$708,300.00
500-xxxx	1000	SF	$30.00	Miscellaneous Gravity Walls	$30,000.00
500-xxxx	58000	SF	$100.00	Bridge No. 1 - Atlanta Rd over I-285 (4 span)	$5,800,000.00
540-1101	1	LS	$750,000.00	REMOVAL OF EXISTING ATLANTA RD BRIDGES AND ORCHARD RD BRIDGE	$750,000.00
624-0400	185600	SF	$19.25	SOUND BARRIER, TYPE-	$3,572,800.00
627-1010	10375	SF	$60.00	MSE WALL FACE, 10 - 20 FT HT, WALL NO -	$622,500.00
				Subtotal:	**$11,483,600.00**

Fuel and Liquid AC

Item Number	Quantity	Units	Unit Price	Item Description	Cost
109-0100	1	LS	$200,212.40	Price Adjustment - Unleaded Fuel	$200,212.40
109-0200	1	LS	$561,247.08	Price Adjustment - Diesel Fuel	$561,247.08
109-0300	1	LS	$423,929.96	Price Adjustment - Asphalt Cement	$423,929.96
				Subtotal:	**$1,185,389.44**

Construction Cost	$25,009,100.13
Engineering and Inspection (5.0 %)	$1,250,455.01
Total Fuel Adjustments	$761,459.48
Total Liquid AC Adjustment	$423,929.96
Total Construction Cost	**$27,444,944.58**
Right Of Way	$15,050,000.00
ReImb. Utilities	$460,000.00
Total Project Cost	**$42,954,944.58**

Attachment 1b

Right-of-Way Cost Estimate

PRELIMINARY - Right of Way Cost Estimate

Date: 3-May-10
Project: STP-222-1(1) Cobb
Existing/Required R/W: Varies/Varies
Project Termini: I-285 West @ Atlanta Road Intersection
Project Description:

P.I. Number 752300
No. Parcels 9

		Area/SF		$/sf				
Land								
	Commercial	12,525	@	$20.00 s.f.	=	$	250,500.00	
	Industrial	2,582	@	$10.00 s.f.	=	$	25,820.00	
	Residential		@		=	$		
	Agricultural		@		=	$		
	Totals	15,107						276,320.00
Improvements								
	pavings, signs, landscaping, site improvements							100,000.00
Relocation								
	Residential		@		=		0.00	
	Commercial	3	@	$50,000.00	=	$	150,000.00	
	Totals	3						150,000.00
Damages								
	Proximity		@			$0		
	Consequential	1	@	5,000,000.00		$5,000,000		
	Consequential	1	@	500,000.00		$500,000		
	Cost-to-Cure Parking	1	@	40,000.00		$40,000		5,540,000.00

6,066,320

Net Cost			$	6,066,320
Scheduling Contingency	55%	0.00	$	3,336,476
Adm/Court Cost	60%	0.00	$	5,641,678
			$	15,044,474

TOTAL COST $ 15,050,000.00

Prepared By: Thomas H. Terrell Jr. 5/5/10
Terrell, Hundley & Carroll RWSI

Approved: Debbie Alcaraz
GDOT R/W

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

Revised:2/08

Attachment 1c

Utility Cost Estimate

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE

OFFICE District Seven Utilities

DATE May 10, 2010

FROM Jonathan Walker, District Utilities Engineer

TO Chandria Brown, Project Manager

SUBJECT **Preliminary Utility Cost Estimate**
STP00-0222-01(001), Cobb County
P.I. No. 752300

As per your request, we are furnishing you with a Preliminary Utility Cost Estimate for the above referenced project.

FACILITY OWNER	NON-REIMBURSABLE	REIMBURSABLE
Atlanta Gas Light Company	$ 119,000.00	
Atlanta Gas Light Network	$ 53,000.00	
AT&T	$ 185,000.00	
Cobb Water Authority	$ 28,000.00	
Cobb Water System	$ 108,000.00	
Comcast Cable	$ 58,000.00	
Charter Cable	$ 35,000.00	
Georgia Power		$285,000.00
Colonial Pipeline		$105,000.00
Plantation Pipeline		$ 70,000.00
GDOT ATMS	$110,000.00	
Cobb Traffic	$250,000.00	
Totals	**$946,000.00**	**$ 460,000.00**

Total Preliminary Utility Cost Estimate **$1,406,000.00**

If you have any questions, please contact Mr. Clyde Cunningham at (770) 986-1117.

Sincerely,

Bryant Poole
District Engineer

For: Jonathan Walker
District Utilities Engineer

BP:JW:CAC

c: Jeff Baker, P.E.
File

Attachment 1d

Fuel/Asphalt Price Adjustment Form

P.I. Number 752300 County Cobb Date 5/5/2010

Project Number STP00-0222-01(001)

Special Provision, Section 109-Measurement and Payment

FUEL PRICE ADJUSTMENT (*ENGLISH 125% MAX)*

ENTER FPL DIESEL	2.877
ENTER FPM DIESEL	6.473

ENTER FPL UNLEADED	2.716
ENTER FPM UNLEADED	6.111

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)**	100000.000	0.29	29000.00	0.15	15000.00	
Excavations paid as specified by Sections 206 **(CUBIC YARD)**	110000.000	0.29	31900.00	0.15	16500.00	
GAB paid as specified by the ton under Section 310 **(TON)**	28750.000	0.29	8337.50	0.24	6900.00	50000 SY (10") converted to TONS
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)**	14650.000	2.90	42485.00	0.71	10401.50	
PCC Pavement paid as specified by the square yard under Section 430 **(SY)**	29000.000	0.25	7250.00	0.20	5800.00	

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Bridge Excavation (CY) Section 211	621.00	29.23	18.1518	8.00	145.21	1.50	27.23	Atlanta Rd & Orchard Rd
Class __Concrete (CY) Section 500	1740.00	557.82	970.6068	8.00	7764.85	1.50	1455.91	Atlanta Rd bridge
Class __Concrete (CY) Section 500	242.00	557.82	134.9924	8.00	1079.94	1.50	202.49	Orchard Rd Bridge
Class __Concrete (CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500	2900.00	684.45	1984.9050	8.00	15879.24	1.50	2977.36	Atlanta Rd bridge
Superstru Con Class__(CY) Section 500	403.00	684.45	275.8334	8.00	2206.67	1.50	413.75	Orchard Rd Bridge
Superstru Con Class__(CY) Section 500				8.00		1.50		
Concrete Handrail (LF) Section 500				8.00		1.50		
Concrete Barrier (LF) Section 500				8.00		1.50		

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	7904.00	164.95	1303.7648	8.00	10430.12	1.50	1955.65	Atlanta Rd bridge (BT 72)
PSC Beams_____ (LF) Section 507	950.00	115.83	110.0385	8.00	880.31	1.50	165.06	Orchard Rd Bridge (Bt 54)
PSC Beams_____ (LF) Section 507				8.00		1.50		
Stru Reinf Plan Quantity(LB) Section 511	580038.00	1.20	696.0456	8.00	5568.36	1.50	1044.07	Atlanta Rd bridge
Stru Reinf Plan Quantity(LB) Section 511	80592.00	1.20	96.7104	8.00	773.68	1.50	145.07	Orchard Rd Bridge
Bar Reinf Steel (LB) Section 511	356741.00	0.69	246.1513	8.00	1969.21	1.50	369.23	Atlanta Rd & Orchard Rd
Piling___inch (LF) Section 520	8300.00	52.43	435.1690	8.00	3481.35	1.50	652.75	Atlanta Rd bridge (HP14X73)
Piling___inch (LF) Section 520	1300.00	46.53	60.4890	8.00	483.91	1.50	90.73	Orchard Rd Bridge (HP14X89)
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=	**169635.36**	**SUM QF UNLEADED=**	**64100.79**

DIESEL PRICE ADJUSTMENT($)	**$561,247.08**
UNLEADED PRICE ADJUSTMENT($)	**$200,212.40**

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 504 ENTER APM 1134

125.00%	INCREASE ADJUSTMENT

L.I.N.	TYPE	TACK (GALLONS)	TACK (TONS)	REMARKS
		3020	12.9712	

TMT = 12.9712

PRICE ADJUSTMENT($)	$7,844.98

400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX

ENTER APL 504 ENTER APM 1134

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
	12.5 mm SP	2000	5.00	100.00	
	19 mm SP	8600	5.00	430.00	
	25 mm SP	2900	5.00	145.00	
			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 =	675.00	

PRICE ADJUSTMENT($)	$408,240.00

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 504

ENTER APM 1134

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)
	PG 58-22	3020

TMT = 12.9712

REMARKS:

MONTHLY PRICE ADJUSTMENT($)	$7,844.98

ADJUSTMENT SUMMARY

FUEL PRICE ADJUSTMENT *(ENGLISH 125% MAX)*

DIESEL PRICE ADJUSTMENT($)	$561,247.08
UNLEADED PRICE ADJUSTMENT($)	$200,212.40
ASPHALT CEMENT PRICE ADJUSTMENT (BITUMINOUS TACK COAT 125% MAX)	$7,844.98
400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX	$408,240.00
ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)	$7,844.98

REMARKS:

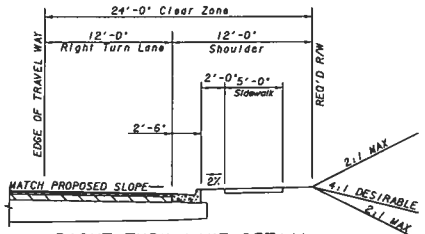
TOTAL ADJUSTMENTS	$1,185,389.45

DWM 10/08

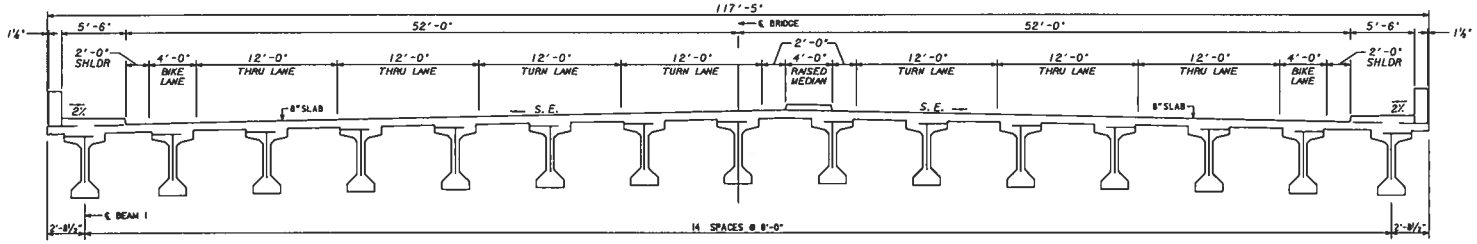
Attachment 2

Typical Sections

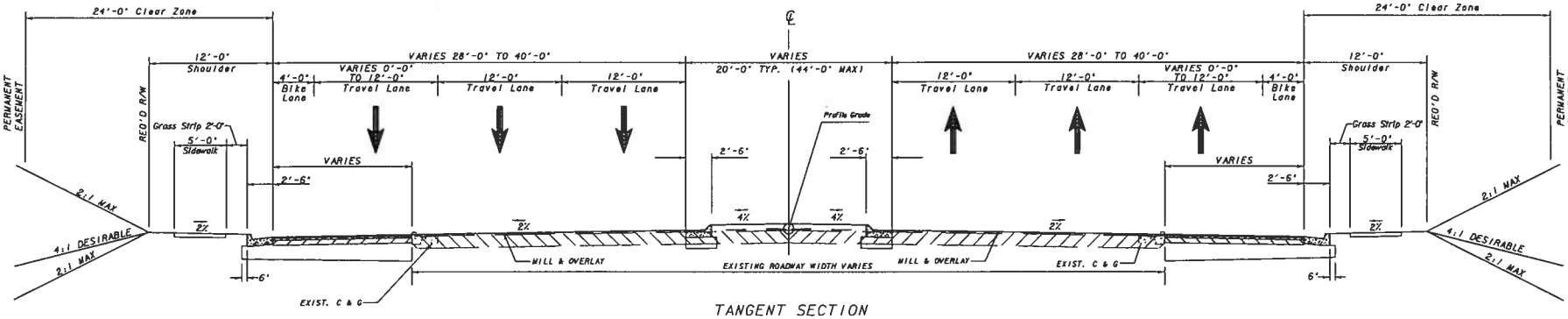
DATE##	TIME##	PAF	DGN	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
$USER$		$$PENTABLE$$		GA	STP00-0222-01(001)		



RIGHT TURN LANE DETAIL



BRIDGE SECTION
ATLANTA ROAD
SEE PLAN FOR LOCATION
45 MPH DESIGN SPEED



TANGENT SECTION
ATLANTA ROAD
SEE PLAN FOR LOCATION
45 MPH DESIGN SPEED

REVISION DATES		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: URBAN DESIGN

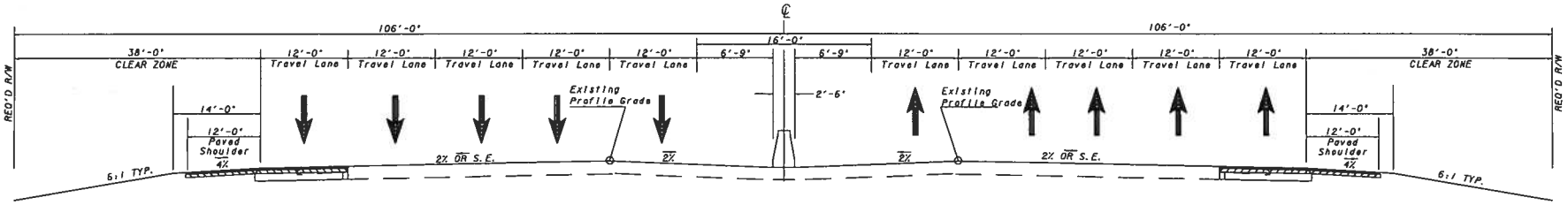
TYPICAL SECTIONS

I-285 @ CR 4519/ATLANTA RD.

DRAWING No. 5-01

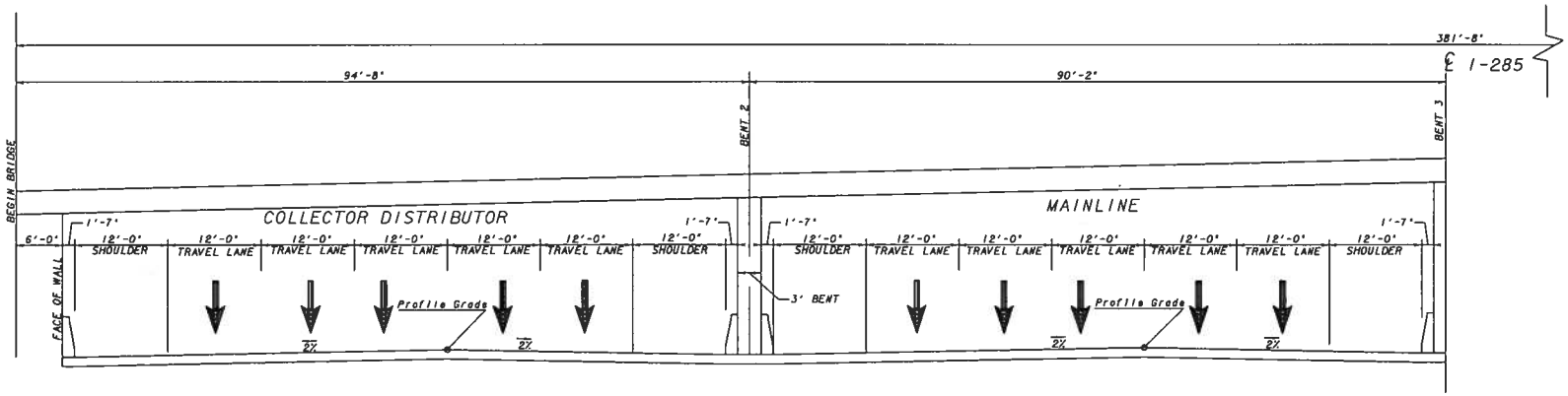
3/1/2019

DATE&&&	TIME&&&	&PRF'S	#DGN#	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
#USER#		#SPENTABLE#		GA	STP00-0222-01(001)		



I-285 AUXILIARY LANES

65 MPH DESIGN SPEED



I-285 @ ATLANTA ROAD FUTURE CONDITIONS

REVISION DATES		

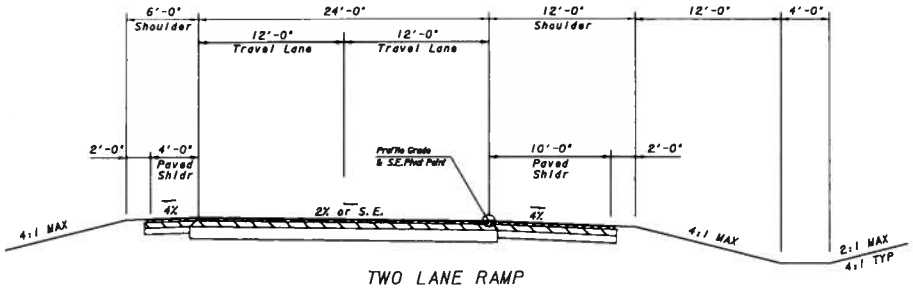
STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: URBAN DESIGN

TYPICAL SECTIONS

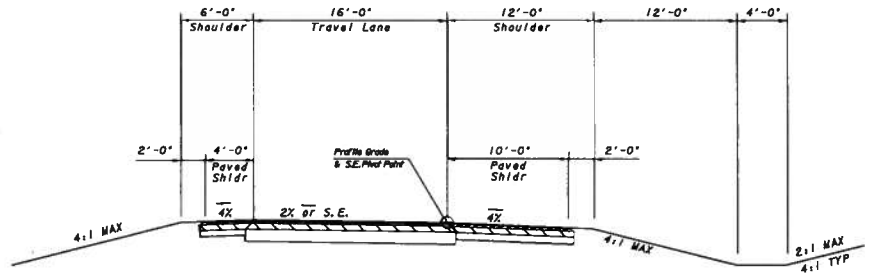
I-285 @ CR 4519/ATLANTA RD.

DRAWING No. 5-02

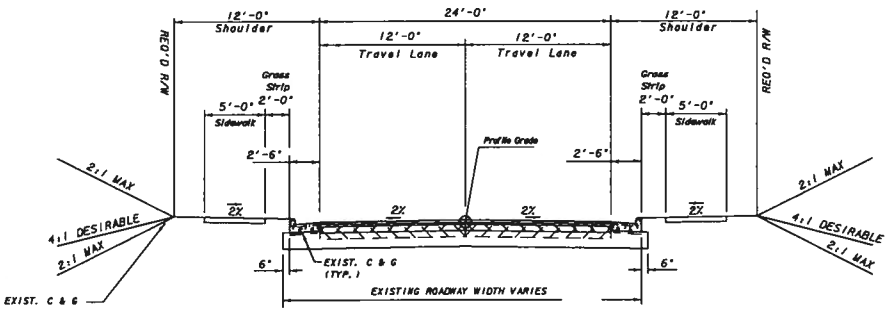
4/20/2010 12:27:08 PM	W:\TransDesign\IPLOT\colortables\eCE600.tbl	H:\COBB\1285_ATL RD\DGN\OLDDGN\Parcle Preliminary Design Files 2008\752300TYPS.dgn(5, 45-49, 60-62, 64)	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
USER: 11200	W:\TransDesign\IPLOT\pentables\HPSet_hs.pen		GA	STP00-0222-01(001)		



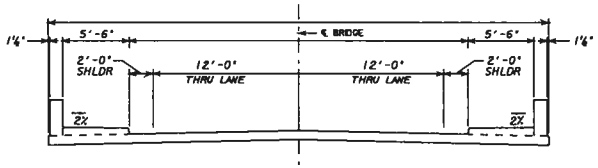
TWO LANE RAMP
45 MPH DESIGN SPEED



ONE LANE RAMP
45 MPH DESIGN SPEED



TANGENT SECTION
ORCHARD ROAD



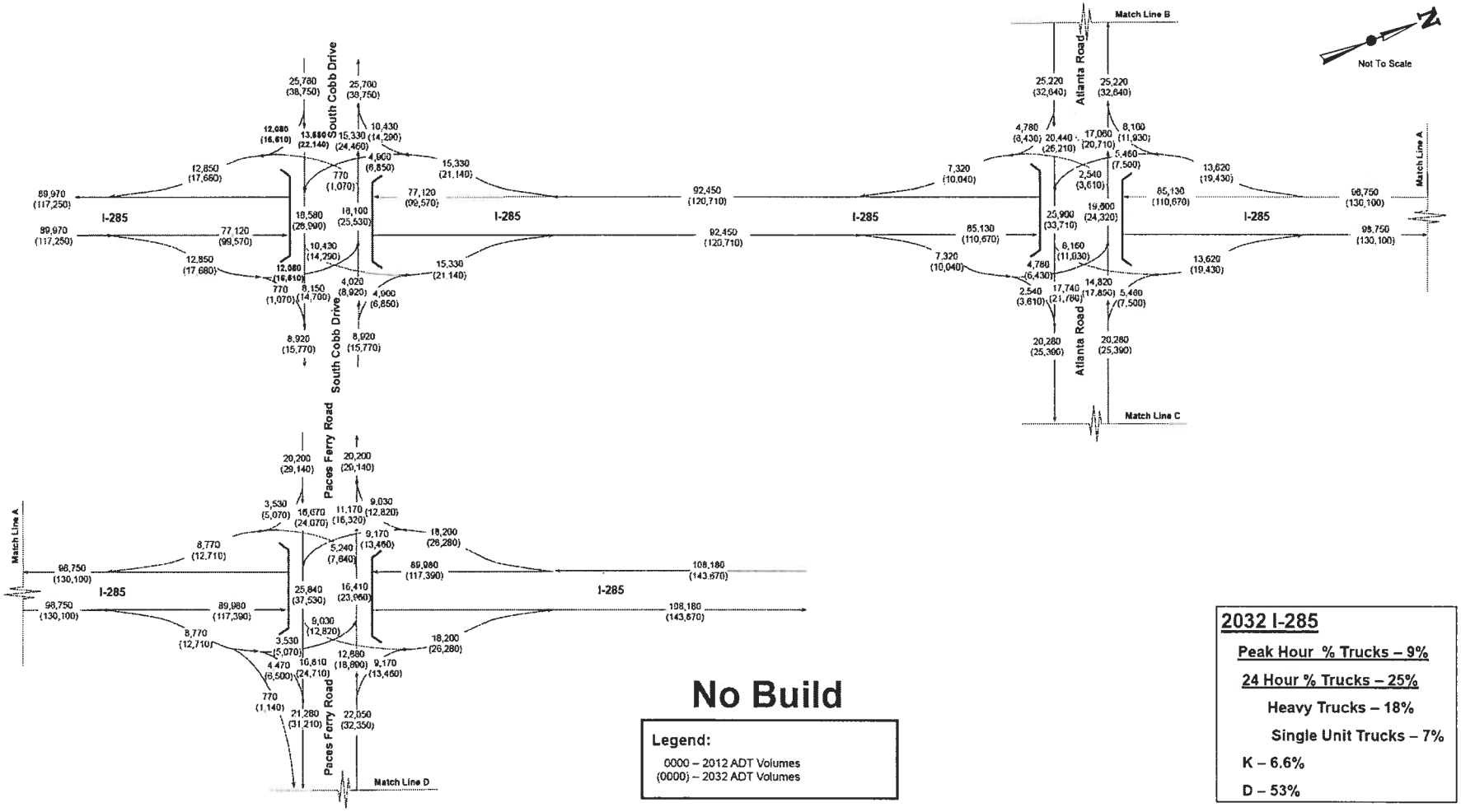
BRIDGE SECTION
ORCHARD ROAD

REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION
	OFFICE: URBAN DESIGN
	TYPICAL SECTIONS
	I-285 @ CR 4519/ATLANTA RD. — DRAWING No. 5-03

Attachment 3

Traffic Diagrams

COUNTY	PROJECT NUMBER
COBB	STP00-0222-01(001)



No Build

Legend:

0000 – 2012 ADT Volumes
(0000) – 2032 ADT Volumes

2032 I-285

Peak Hour % Trucks – 9%

24 Hour % Trucks – 25%

Heavy Trucks – 18%

Single Unit Trucks – 7%

K – 6.6%

D – 53%

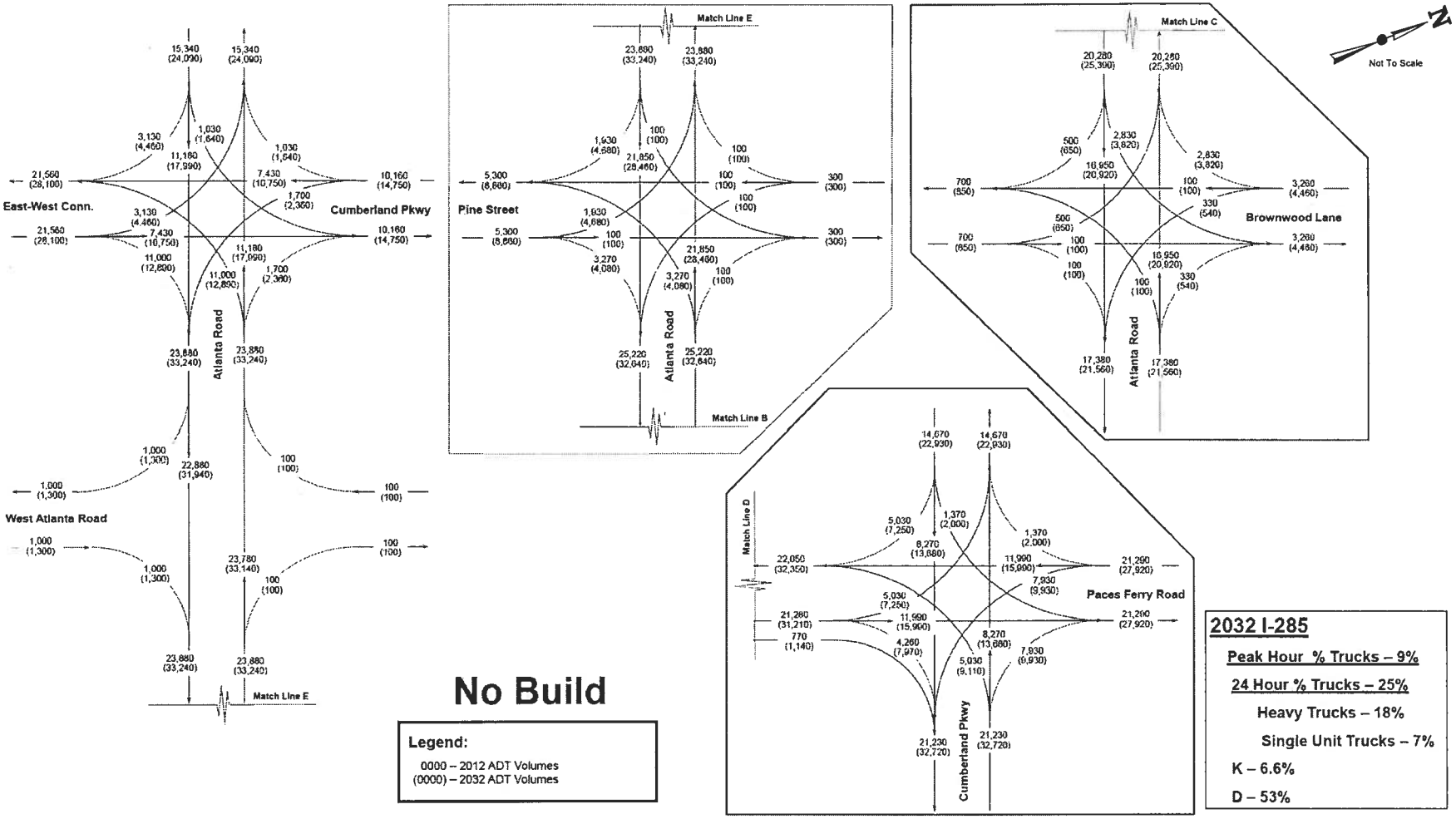
PBSJ

Atlanta Road @ I-285
Interchange Modification Report
Project Number: *STP00-0222-01(001)*
PI Number: *752300*

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: URBAN DESIGN
Design Traffic Volumes
I-285 @ CR 4519/ATLANTA ROAD

Figure 4.2

COUNTY	PROJECT NUMBER
COBB	STP00-0222-01(001)



No Build

Legend:

0000 – 2012 ADT Volumes
(0000) – 2032 ADT Volumes

2032 I-285

Peak Hour % Trucks – 9%

24 Hour % Trucks – 25%

Heavy Trucks – 18%

Single Unit Trucks – 7%

K – 6.6%

D – 53%

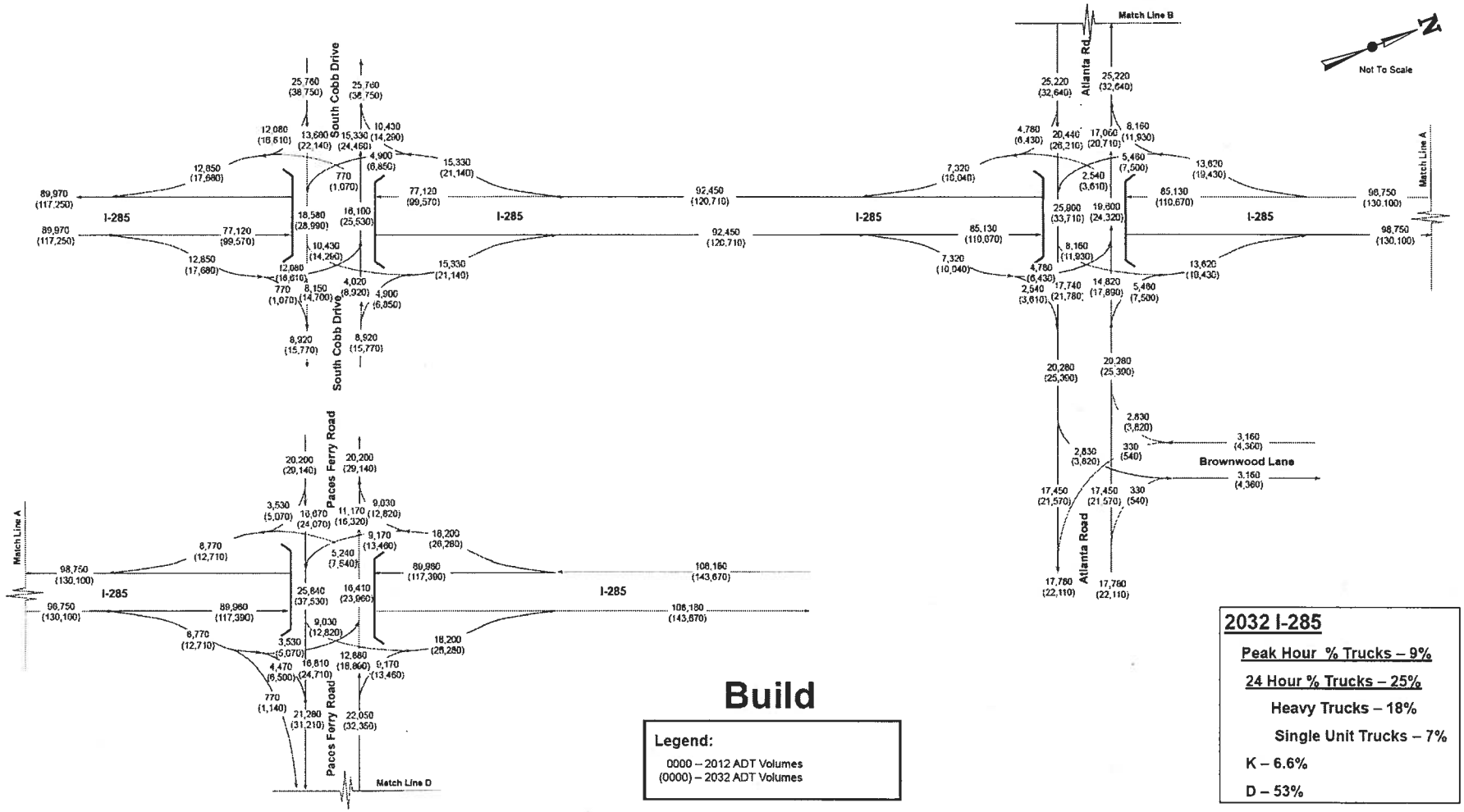
PBSJ

Atlanta Road @ I-285
Interchange Modification Report
Project Number: *STP00-0222-01(001)*
PI Number: *752300*

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: URBAN DESIGN
Design Traffic Volumes
I-285 @ CR 4519/ATLANTA ROAD

Figure 4.3

COUNTY	PROJECT NUMBER
COBB	STP00-0222-01(001)



Build

Legend:

0000 – 2012 ADT Volumes
(0000) – 2032 ADT Volumes

2032 I-285

Peak Hour % Trucks – 9%

24 Hour % Trucks – 25%

Heavy Trucks – 18%

Single Unit Trucks – 7%

K – 6.6%

D – 53%

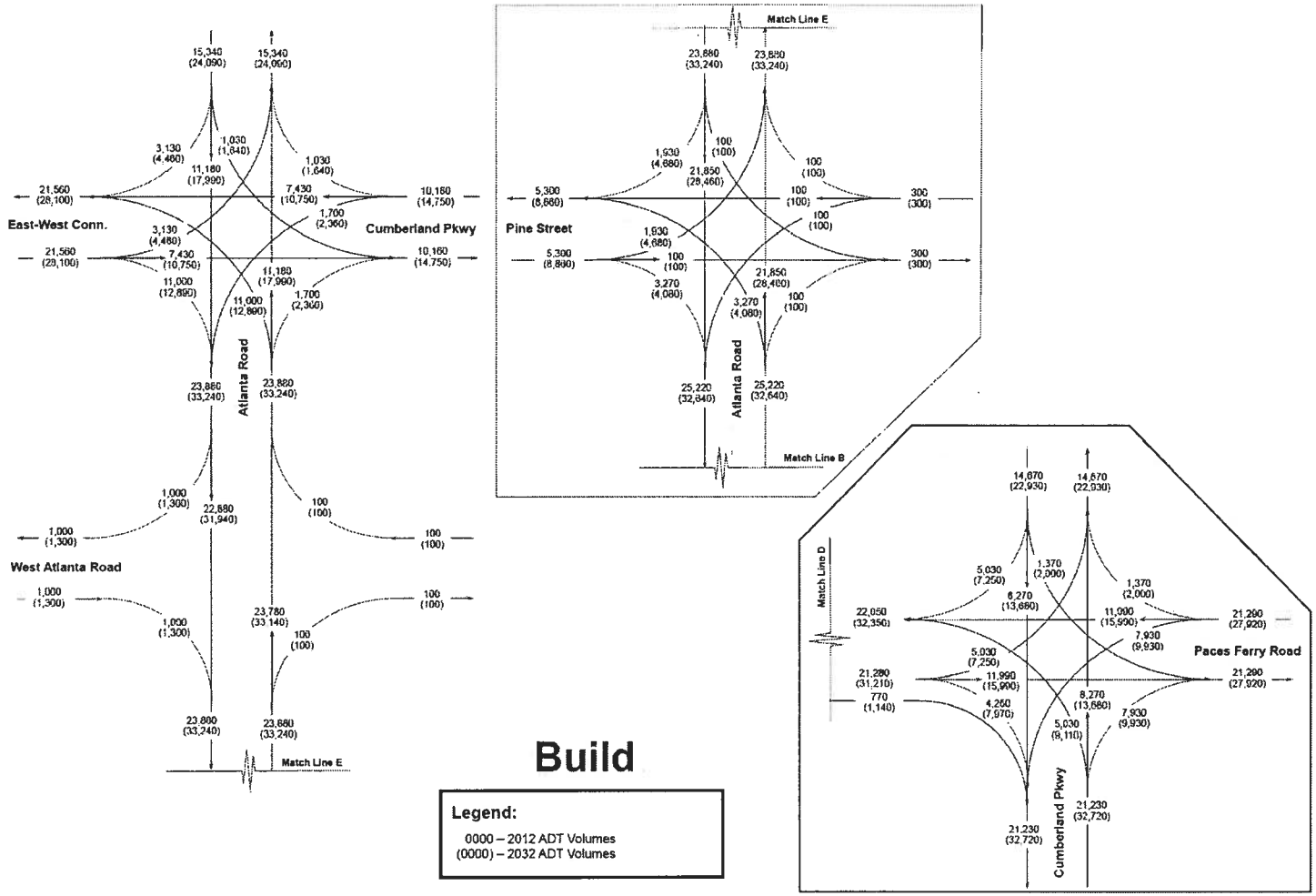
PBSJ

Atlanta Road @ I-285
Interchange Modification Report
Project Number: *STP00-0222-01(001)*
PI Number: *752300*

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: URBAN DESIGN
Design Traffic Volumes
I-285 @ CR 4519/ATLANTA ROAD

Figure 4.4

COUNTY	PROJECT NUMBER
COBB	STP00-0222-01(001)



Build

Legend:

0000 – 2012 ADT Volumes
(0000) – 2032 ADT Volumes

2032 I-285

Peak Hour % Trucks – 9%

24 Hour % Trucks – 25%

Heavy Trucks – 18%

Single Unit Trucks – 7%

K – 6.6%

D – 53%

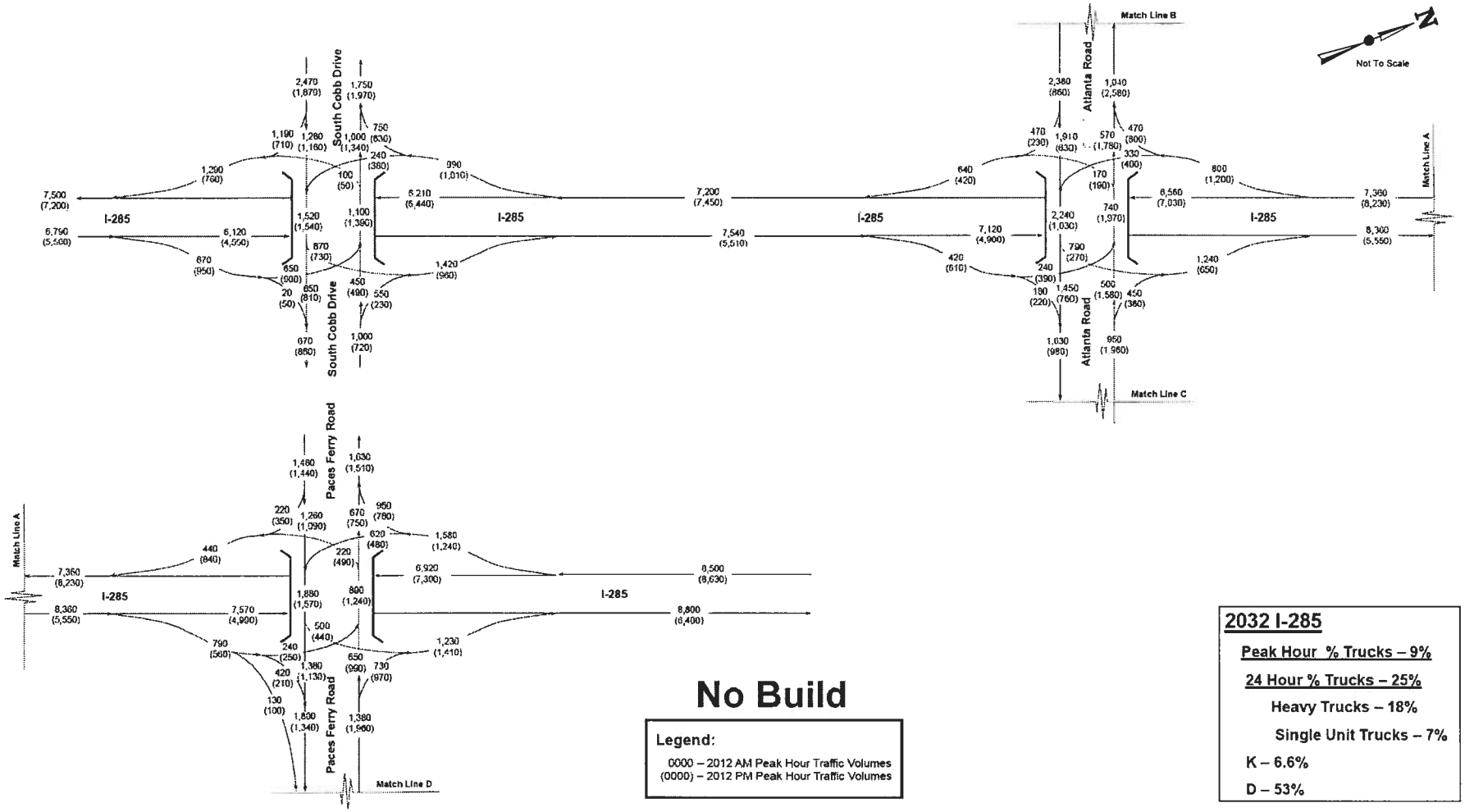
PBSJ

Atlanta Road @ I-285
Interchange Modification Report
Project Number: *STP00-0222-01(001)*
PI Number: *752300*

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: URBAN DESIGN
Design Traffic Volumes
I-285 @ CR 4519/ATLANTA ROAD

Figure 4.5

COUNTY	PROJECT NUMBER
COBB	STP00-0222-01(001)



No Build

Legend:

0000 – 2012 AM Peak Hour Traffic Volumes
(0000) – 2012 PM Peak Hour Traffic Volumes

2032 I-285

Peak Hour % Trucks – 9%

24 Hour % Trucks – 25%

Heavy Trucks – 18%

Single Unit Trucks – 7%

K – 6.6%

D – 53%

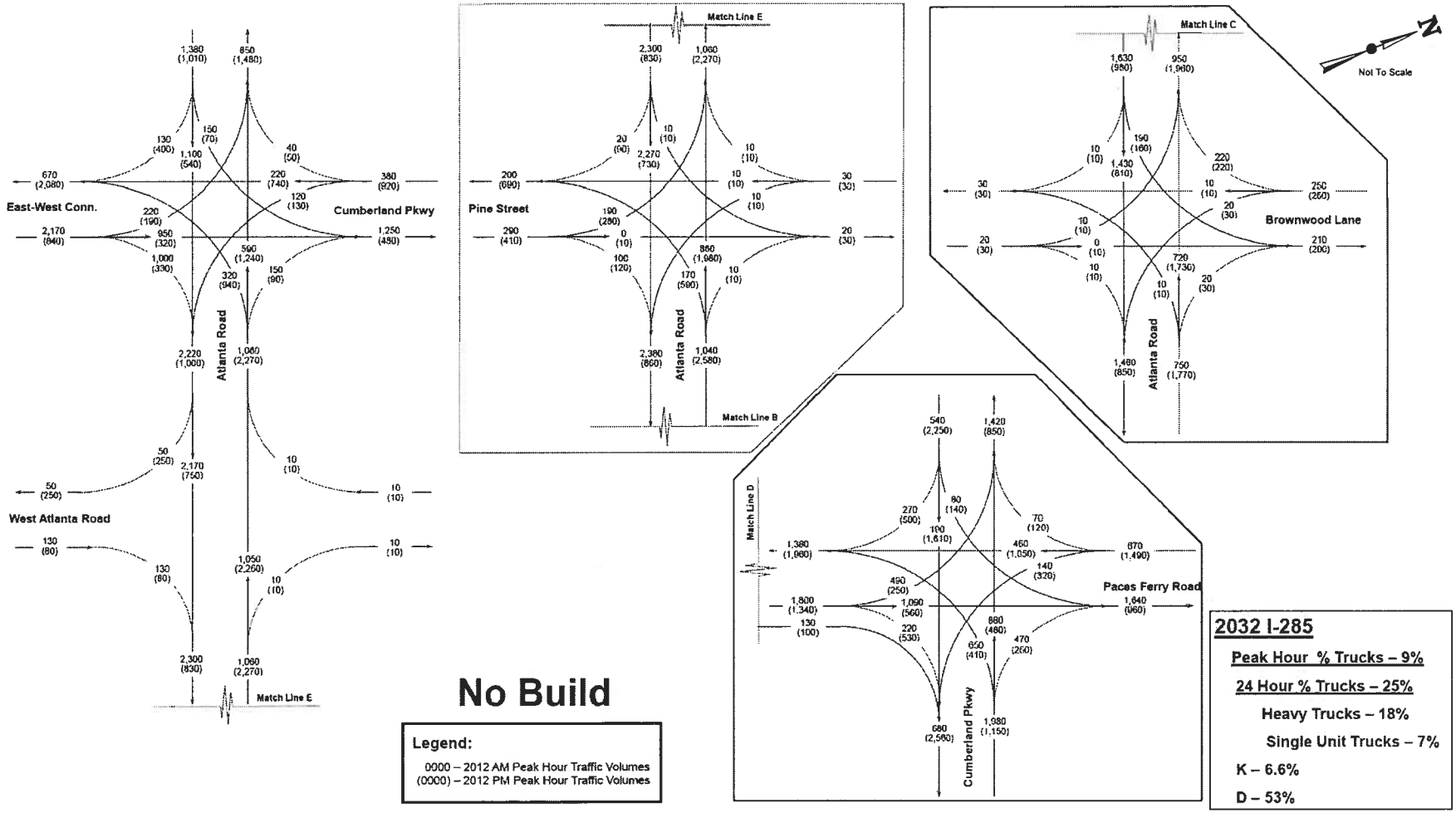
PBSJ

Atlanta Road @ I-285
Interchange Modification Report
Project Number: *STP00-0222-01(001)*
PI Number: *752300*

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: URBAN DESIGN
Design Traffic Volumes
I-285 @ CR 4519/ATLANTA ROAD

Figure 4.6

COUNTY	PROJECT NUMBER
COBB	STP00-0222-01(001)



No Build

Legend:

0000 – 2012 AM Peak Hour Traffic Volumes
(0000) – 2012 PM Peak Hour Traffic Volumes

2032 I-285

Peak Hour % Trucks – 9%

24 Hour % Trucks – 25%

Heavy Trucks – 18%

Single Unit Trucks – 7%

K – 6.6%

D – 53%

PBSJ

Atlanta Road @ I-285
Interchange Modification Report
Project Number: *STP00-0222-01(001)*
PI Number: *752300*

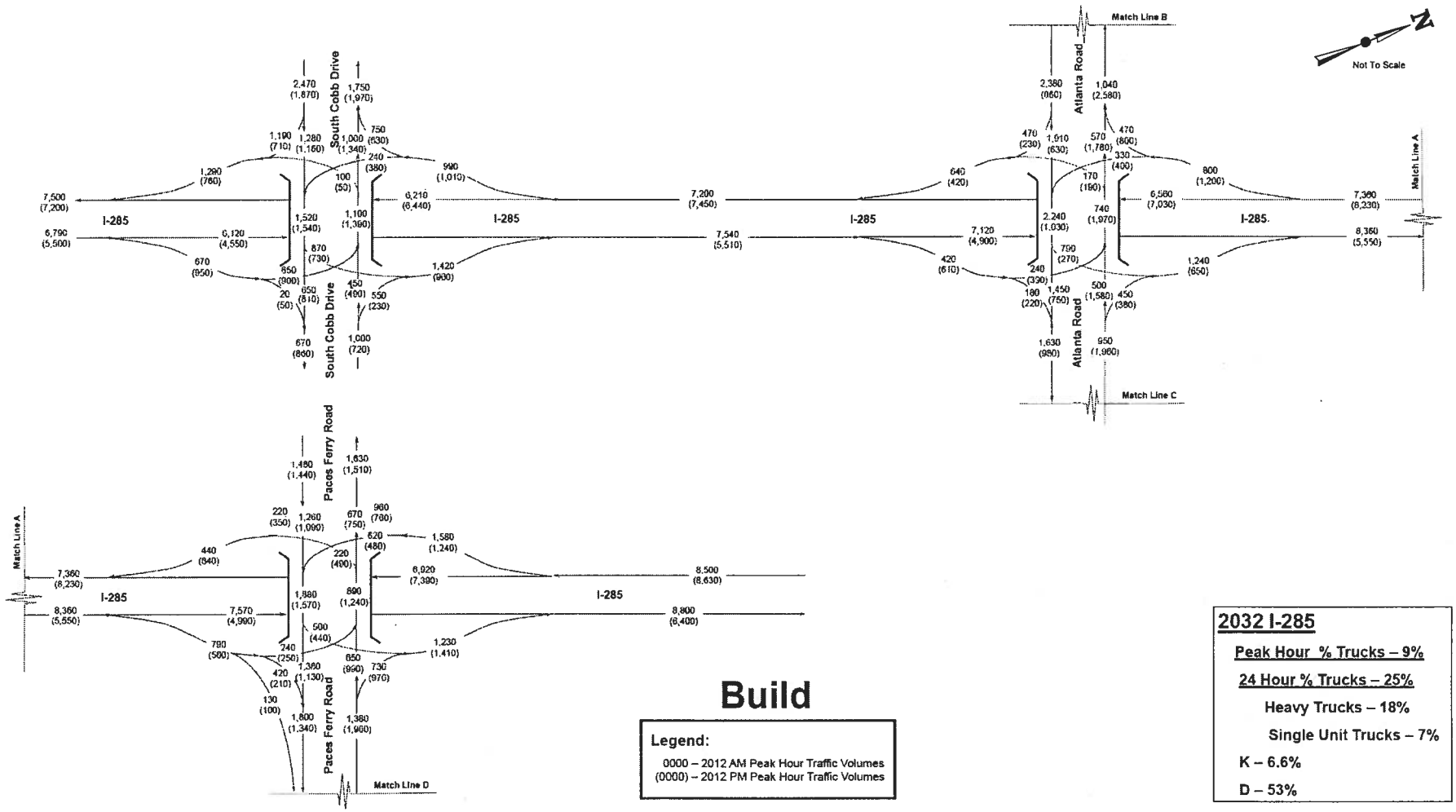
STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: URBAN DESIGN

Design Traffic Volumes

I-285 @ CR 4519/ATLANTA ROAD

Figure 4.7

COUNTY	PROJECT NUMBER
COBB	STP00-0222-01(001)



Build

Legend:

0000 – 2012 AM Peak Hour Traffic Volumes
(0000) – 2012 PM Peak Hour Traffic Volumes

2032 I-285

Peak Hour % Trucks – 9%

24 Hour % Trucks – 25%

Heavy Trucks – 18%

Single Unit Trucks – 7%

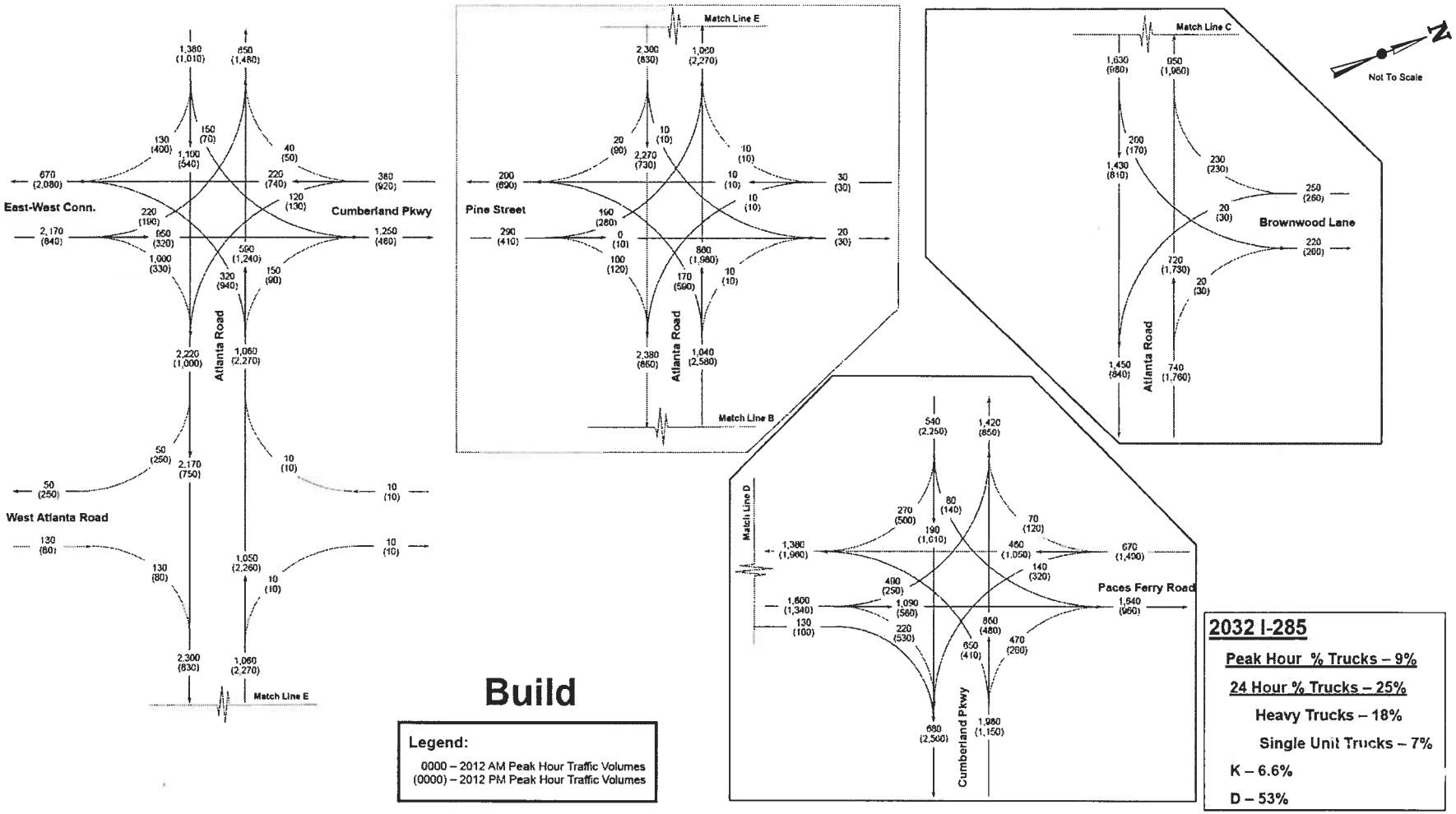
K – 6.6%

D – 53%

PBSJ	Atlanta Road @ I-285 Interchange Modification Report Project Number: *STP00-0222-01(001)* PI Number: *752300*	*STATE OF GEORGIA* *DEPARTMENT OF TRANSPORTATION* *OFFICE: URBAN DESIGN* *Design Traffic Volumes* *I-285 @ CR 4519/ATLANTA ROAD*

Figure 4.8

COUNTY	PROJECT NUMBER
COBB	STP00-0222-01(001)



Build

Legend:

0000 – 2012 AM Peak Hour Traffic Volumes
(0000) – 2012 PM Peak Hour Traffic Volumes

2032 I-285

Peak Hour % Trucks – 9%

24 Hour % Trucks – 25%

Heavy Trucks – 18%

Single Unit Trucks – 7%

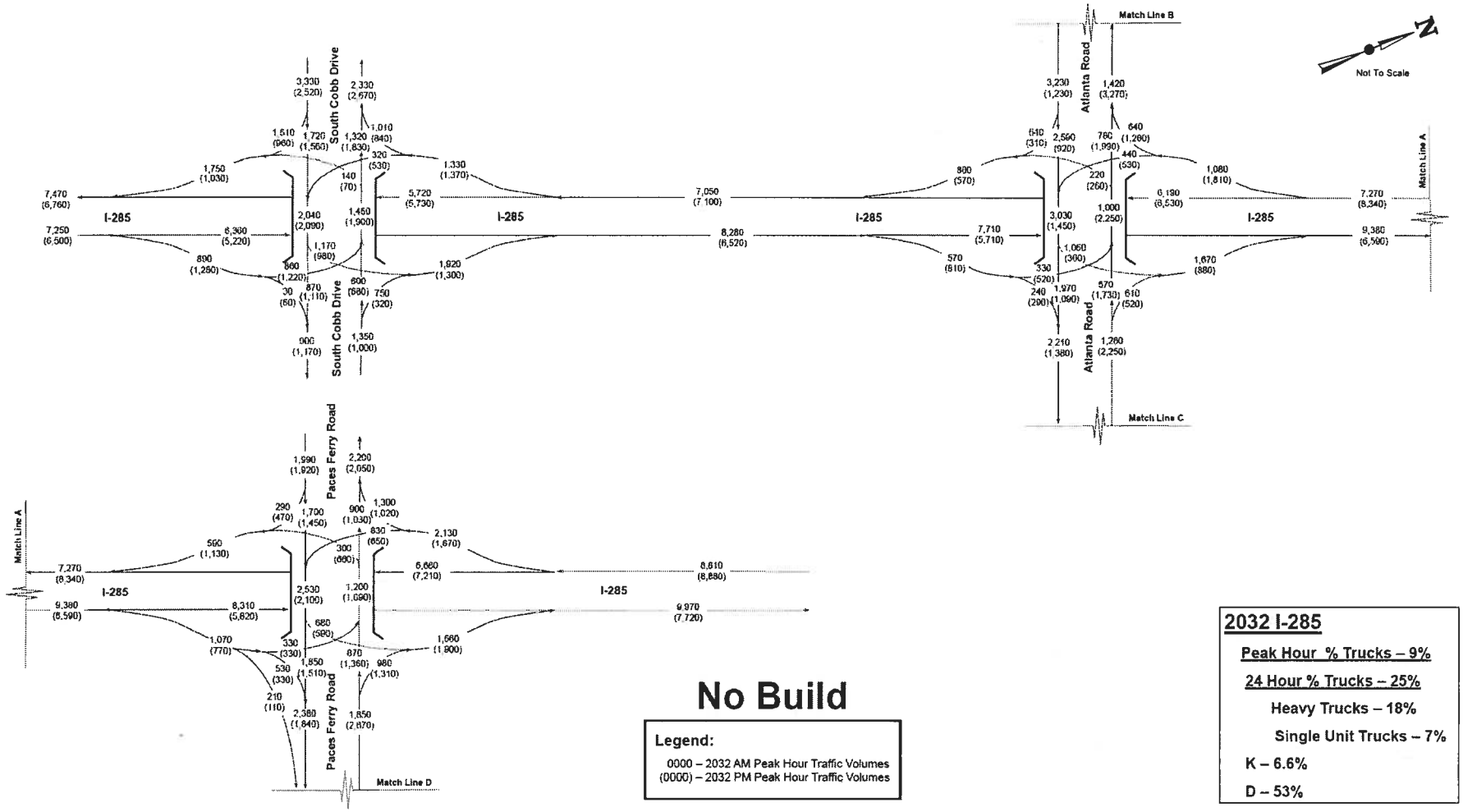
K – 6.6%

D – 53%

PBSJ	Atlanta Road @ I-285 Interchange Modification Report Project Number: *STP00-0222-01(001)* PI Number: *752300*	*STATE OF GEORGIA* *DEPARTMENT OF TRANSPORTATION* *OFFICE: URBAN DESIGN* *Design Traffic Volumes* *I-285 @ CR 4519/ATLANTA ROAD*

Figure 4.9

COUNTY	PROJECT NUMBER
COBB	STP00-0222-01(001)



No Build

Legend:

0000 – 2032 AM Peak Hour Traffic Volumes
(0000) – 2032 PM Peak Hour Traffic Volumes

2032 I-285

Peak Hour % Trucks – 9%

24 Hour % Trucks – 25%

Heavy Trucks – 18%

Single Unit Trucks – 7%

K – 6.6%

D – 53%

PBSJ

Atlanta Road @ I-285

Interchange Modification Report

Project Number: ***STP00-0222-01(001)***

PI Number: ***752300***

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

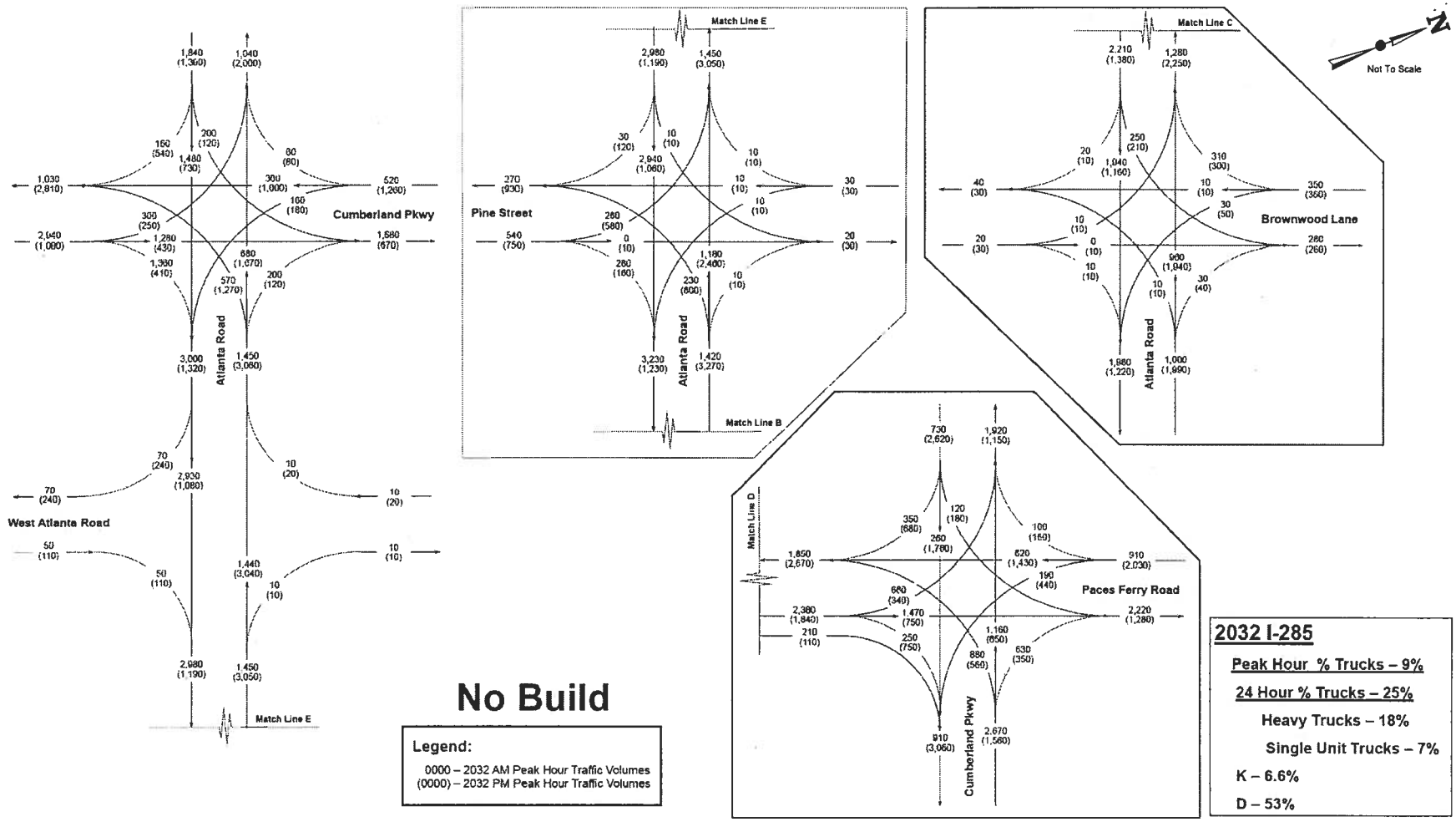
OFFICE: URBAN DESIGN

Design Traffic Volumes

I-285 @ CR 4519/ATLANTA ROAD

Figure 4.10

COUNTY	PROJECT NUMBER
COBB	STP00-0222-01(001)



No Build

Legend:

0000 – 2032 AM Peak Hour Traffic Volumes
(0000) – 2032 PM Peak Hour Traffic Volumes

2032 I-285

Peak Hour % Trucks – 9%

24 Hour % Trucks – 25%

Heavy Trucks – 18%

Single Unit Trucks – 7%

K – 6.6%

D – 53%

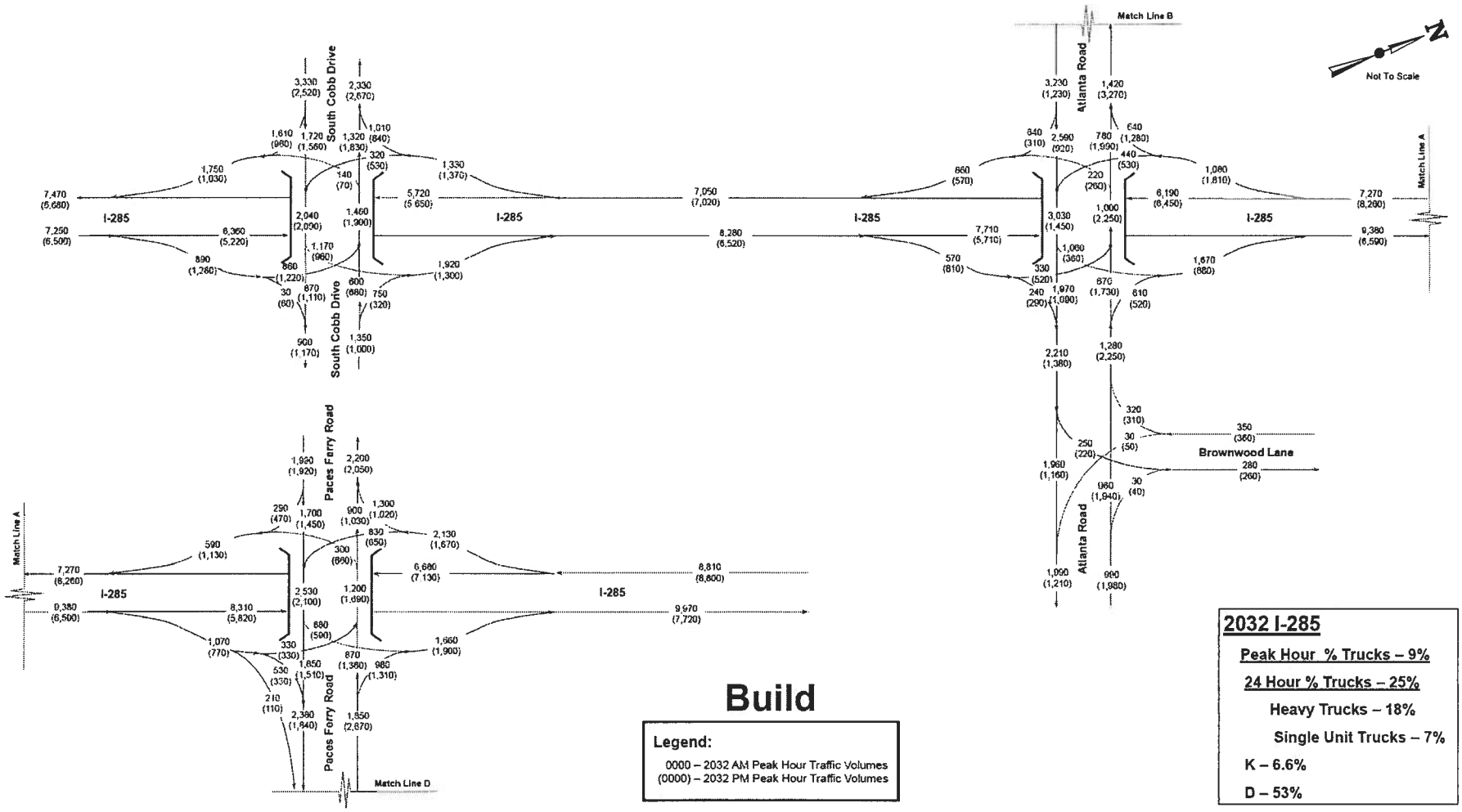
PBSJ

Atlanta Road @ I-285
Interchange Modification Report
Project Number: *STP00-0222-01(001)*
PI Number: *752300*

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: URBAN DESIGN
Design Traffic Volumes
I-285 @ CR 4519/ATLANTA ROAD

Figure 4.11

COUNTY	PROJECT NUMBER
COBB	STP00-0222-01(001)



Build

Legend:

0000 – 2032 AM Peak Hour Traffic Volumes
(0000) – 2032 PM Peak Hour Traffic Volumes

2032 I-285

Peak Hour % Trucks – 9%

24 Hour % Trucks – 25%

Heavy Trucks – 18%

Single Unit Trucks – 7%

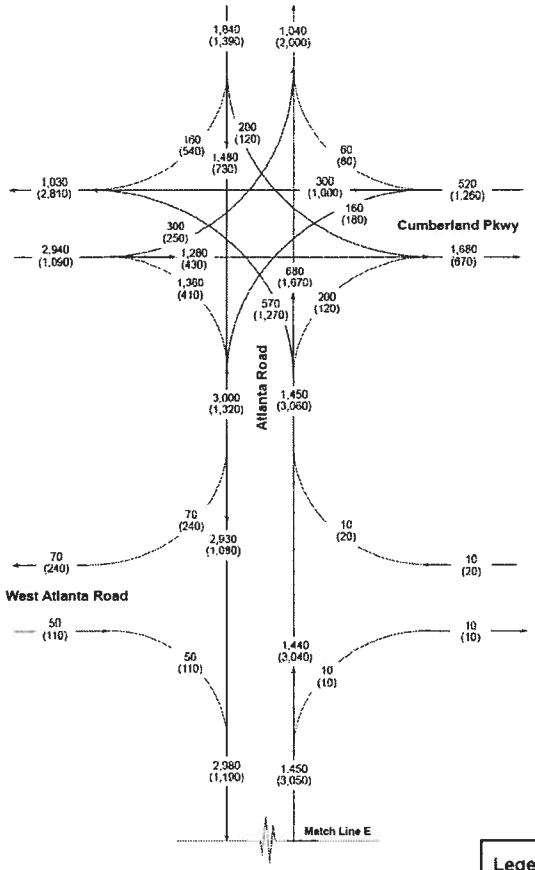
K – 6.6%

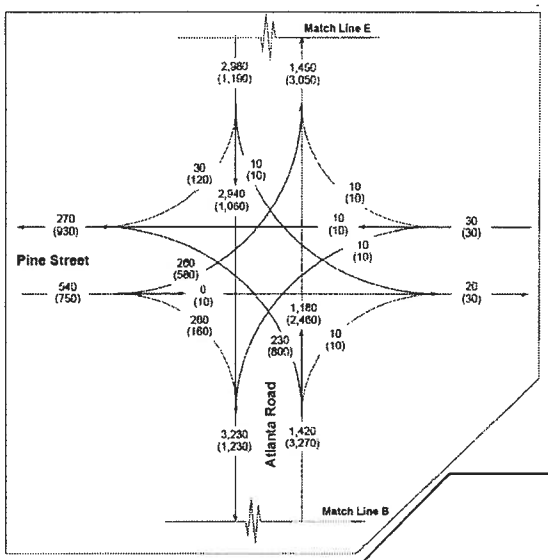
D – 53%

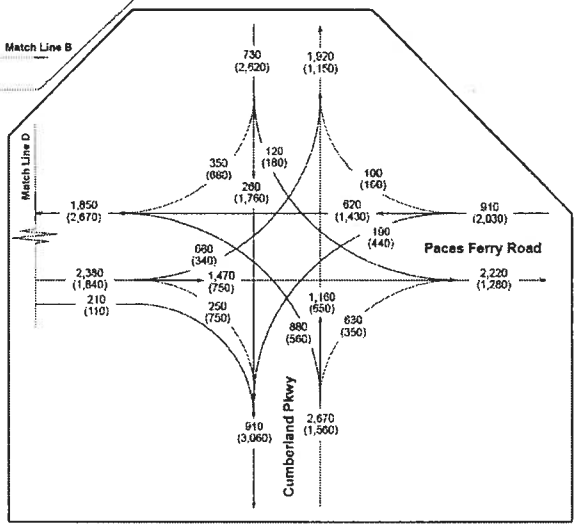
PBSJ	Atlanta Road @ I-285 Interchange Modification Report Project Number: *STP00-0222-01(001)* PI Number: *752300*	*STATE OF GEORGIA* *DEPARTMENT OF TRANSPORTATION* *OFFICE: URBAN DESIGN* *Design Traffic Volumes* *I-285 @ CR 4519/ATLANTA ROAD*

Figure 4.12

COUNTY	PROJECT NUMBER
COBB	STP00-0222-01(001)







Not To Scale

Build

Legend:

0000 – 2032 AM Peak Hour Traffic Volumes
(0000) – 2032 PM Peak Hour Traffic Volumes

2032 I-285

Peak Hour % Trucks – 9%

24 Hour % Trucks – 25%

Heavy Trucks – 18%

Single Unit Trucks – 7%

K – 6.6%

D – 53%

PBSJ

Atlanta Road @ I-285
Interchange Modification Report
Project Number: *STP00-0222-01(001)*
PI Number: *752300*

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: URBAN DESIGN

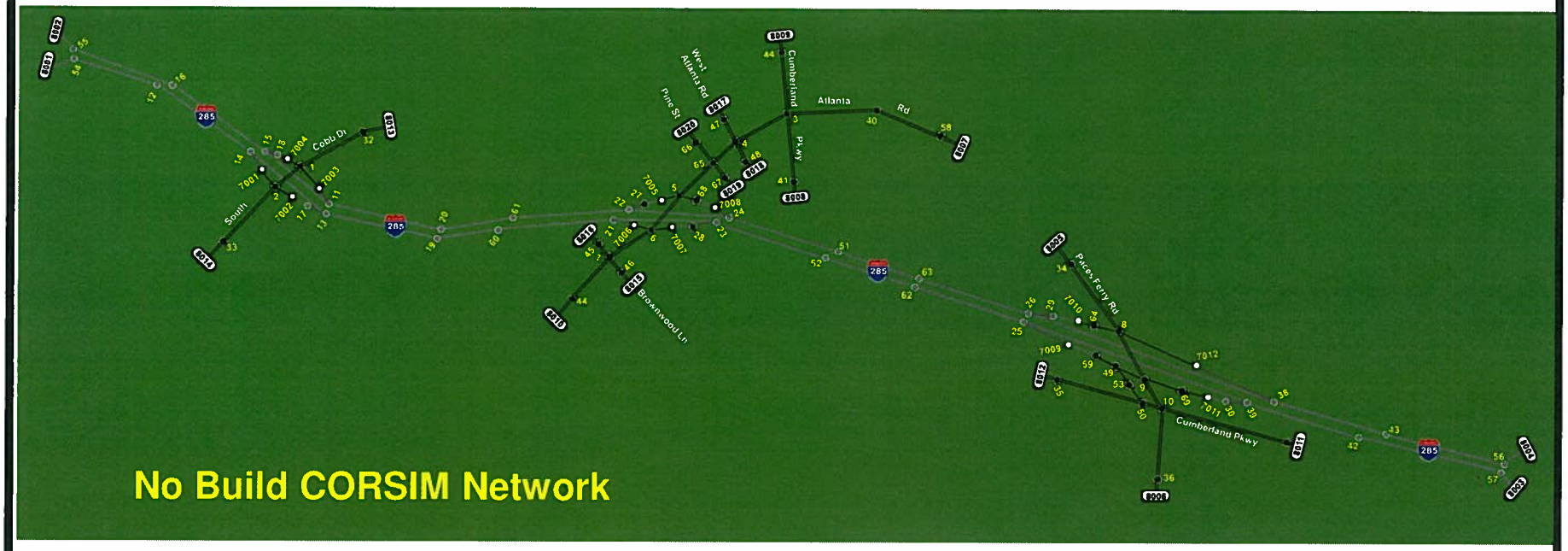
Design Traffic Volumes

I-285 @ CR 4519/ATLANTA ROAD

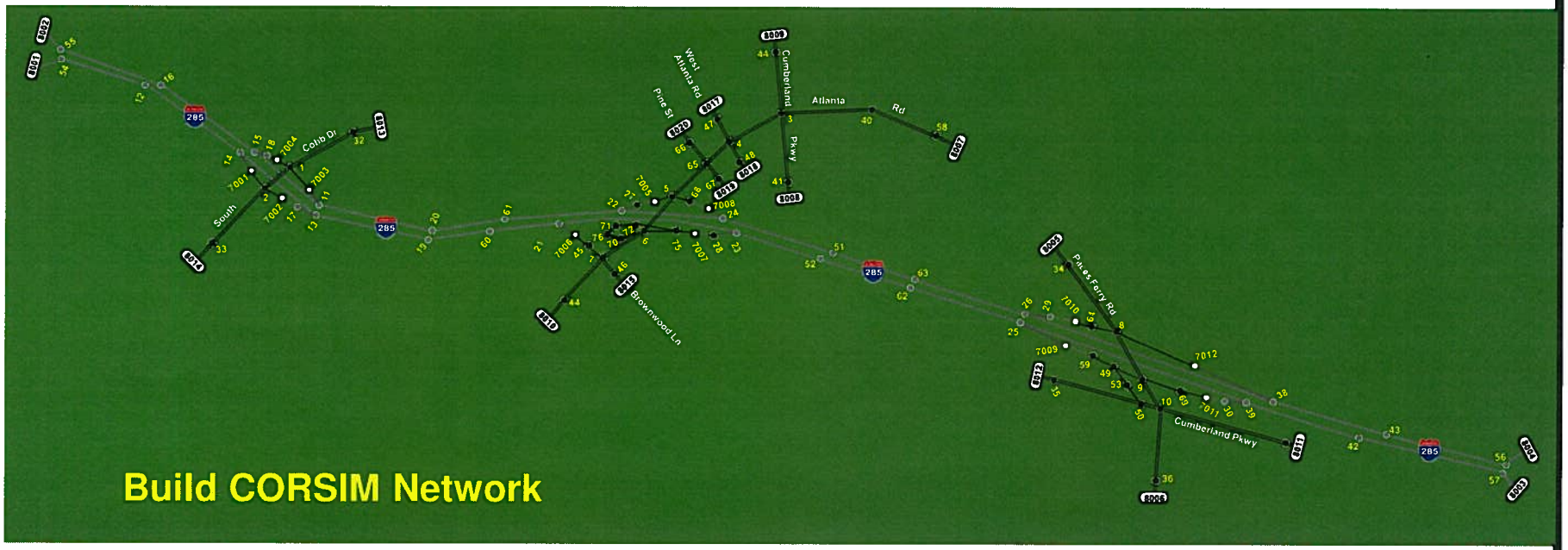
Figure 4.13

Attachment 4a

Capacity Analysis – CORSIM



	PBSJ	Atlanta Road @ I-285 Interchange Modification Report Project Number: *STP00-0222-01(001)* PI Number: *752300*	**Figure A-1**



	PBSJ	Atlanta Road @ I-285 Interchange Modification Report Project Number: *STP00-0222-01(001)* PI Number: *752300*	**Figure A-2**

Attachment 4b

Capacity Analysis – LOS Graphics

I-285/Atlanta Road
2012 AM Peak Hour Intersection Level of Service
Build Alternate - Tight Diamond

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2012 AM Volumes Design	2012 AM Volumes CORSIM	Delay (Sec/Veh)	LOS
South Cobb Drive at I-285 Southbound Ramps (Signalized)	Eastbound	32	1	Thru	1,282	1,251	17.5	B
		32	1	Right	1,190	1,216	9.8	A
				OVERALL	2,472	2,467	13.7	B
	Westbound	2	1	Left	100	98	24.6	C
		2	1	Thru	1,000	1,028	16.4	B
				OVERALL	1,100	1,126	17.1	B
	Southbound	7003	1	Left	240	264	40.7	D
		7003	1	Right	750	805	2.4	A
				OVERALL	990	1,069	11.9	B
	Intersection Total				4,562	4,662	14.1	B
South Cobb Drive at I-285 Northbound Ramps (Signalized)	Eastbound	1	2	Left	870	953	29.5	C
		1	2	Thru	650	567	31.9	C
				OVERALL	1,520	1,520	30.4	C
	Westbound	33	2	Thru	450	468	47.4	D
		33	2	Right	550	533	10.1	A
				OVERALL	1,000	1,001	27.5	C
	Northbound	7001	2	Left	650	658	36.2	D
		7001	2	Right	20	24	4.3	A
				OVERALL	670	682	35.0	C
	Intersection Total				3,190	3,203	30.5	C
Atlanta Road at Cumberland Parkway (Signalized)	Eastbound	41	3	Left	220	218	57.1	E
		41	3	Thru	950	982	53.9	D
		41	3	Right	1,000	969	4.4	A
				OVERALL	2,170	2,169	32.1	C
	Westbound	31	3	Left	120	118	44.1	D
		31	3	Thru	220	221	37.1	D
		31	3	Right	40	41	5.6	A
				OVERALL	380	380	35.8	D
	Southbound	40	3	Left	150	130	22.6	C
		40	3	Thru	1,100	1,063	36.4	D
		40	3	Right	180	188	8.4	A
				OVERALL	1,430	1,381	31.3	C
	Northbound	4	3	Left	320	329	50.4	D
		4	3	Thru	590	604	28.2	C
		4	3	Right	150	151	7.4	A
				OVERALL	1,060	1,084	32.0	C
	Intersection Total				3,980	3,930	41.0	D
Atlanta Road at West Atlanta Road (Unsignalized)	Eastbound	47	4	Right	130	127	107.8	F
				OVERALL	130	127	107.8	F
	Westbound	48	4	Right	10	9	3.3	A
				OVERALL	10	9	3.3	A
	Southbound	3	4	Thru	2,170	2,105	0.7	A
		3	4	Right	50	46	2.7	A
				OVERALL	2,220	2,151	0.7	A
	Northbound	65	4	Thru	1,050	1,078	0.0	A
		65	4	Right	10	9	1.3	A
				OVERALL	1,060	1,087	0.0	A
	Intersection Total				2,360	2,287	6.7	A

I-285/Atlanta Road
2012 AM Peak Hour Intersection Level of Service
Build Alternate - Tight Diamond

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2012 AM Volumes Design	2012 AM Volumes CORSIM	Delay (Sec/Veh)	LOS
Atlanta Road at Pine Street (Signalized)	Eastbound	66	65	Left	190	188	41.4	D
		66	65	Thru	0	0	0.0	A
		66	65	Right	100	101	28.0	C
				OVERALL	290	289	36.7	D
	Westbound	67	65	Left	10	12	44.0	D
		67	65	Thru	10	10	46.8	D
		67	65	Right	10	7	6.0	A
				OVERALL	30	29	35.8	D
	Southbound	4	65	Left	10	0	0.0	A
		4	65	Thru	2,270	2,212	20.2	C
		4	65	Right	20	21	6.3	A
				OVERALL	2,300	2,233	20.1	B
	Northbound	5	65	Left	170	175	54.5	D
		5	65	Thru	860	889	7.1	A
		5	65	Right	10	0	0.0	A
				OVERALL	1,040	1,064	14.9	B
	Intersection Total				2,620	2,551	28.4	C
Atlanta Road at I-285 Southbound Ramps (Signalized)	Eastbound	65	5	Thru	1,910	1,846	6.8	A
		65	5	Right	470	480	5.6	A
				OVERALL	2,380	2,326	6.6	A
	Westbound	6	5	Left	170	190	23.1	C
		6	5	Thru	570	572	16.4	B
				OVERALL	740	762	18.1	B
	Southbound	68	5	Left	330	379	43.9	D
		68	5	Right	470	495	3.5	A
				OVERALL	800	874	21.0	C
	Intersection Total				3,920	3,962	12.0	B
Atlanta Road at I-285 Northbound Ramps (Signalized)	Eastbound	5	6	Left	790	743	15.2	B
		5	6	Thru	1,450	1,475	3.3	A
				OVERALL	2,240	2,218	7.3	A
	Westbound	7	6	Thru	500	515	45.9	D
		7	6	Right	450	428	9.8	A
				OVERALL	950	943	29.5	C
	Northbound	45	6	Left	240	247	43.8	D
		45	6	Right	180	195	17.0	B
				OVERALL	420	442	32.0	C
	Intersection Total				3,610	3,603	16.1	B
Atlanta Road at Brownwood Lane (Signalized)	Eastbound	6	7	Left	190	187	14.6	B
		6	7	Thru	1,440	1,491	22.5	C
				OVERALL	1,630	1,678	21.6	C
	Westbound	44	7	Thru	730	728	11.1	B
		44	7	Right	20	20	2.7	A
				OVERALL	750	748	10.9	B
	Southbound	46	7	Left	20	23	35.0	C
		46	7	Right	220	216	7.4	A
				OVERALL	240	239	10.0	A
	Intersection Total				2,620	2,665	17.5	B

I-285/Atlanta Road
2012 AM Peak Hour Intersection Level of Service
Build Alternate - Tight Diamond

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2012 AM Volumes Design	2012 AM Volumes CORSIM	Delay (Sec/Veh)	LOS
Paces Ferry Road at I-285 Southbound Ramps (Signalized)	Eastbound	34	8	Thru	1,260	1,235	19.2	B
		34	8	Right	220	231	3.5	A
				OVERALL	1,480	1,466	16.8	B
	Westbound	9	8	Left	220	220	51.6	D
		9	8	Thru	670	707	4.5	A
				OVERALL	890	927	15.6	B
	Southbound	7012	8	Left	620	547	34.4	C
		7012	8	Right	960	885	8.1	A
				OVERALL	1,580	1,432	18.2	B
	Intersection Total				3,950	3,825	17.0	B
Paces Ferry Road at I-285 Northbound Ramps (Signalized)	Eastbound	8	9	Left	500	460	27.9	C
		8	9	Thru	1,380	1,328	9.2	A
				OVERALL	1,880	1,788	14.0	B
	Westbound	10	9	Thru	650	672	16.3	B
		10	9	Right	730	668	4.9	A
				OVERALL	1,380	1,340	10.6	B
	Northbound	49	9	Left	240	248	38.2	D
		49	9	Right	420	425	12.0	B
				OVERALL	660	673	21.7	C
	Intersection Total				3,920	3,801	14.2	B
Paces Ferry Road at Cumberland Parkway (Signalized)	Eastbound	9	10	Left	490	490	57.5	E
		9	10	Thru	1,090	1,039	35.8	D
		9	10	Right	220	225	6.6	A
				OVERALL	1,800	1,754	38.1	D
	Westbound	36	10	Left	140	146	51.8	D
		36	10	Thru	460	446	27.9	C
		36	10	Right	70	79	22.6	C
				OVERALL	670	671	32.5	C
	Southbound	37	10	Left	80	66	48.1	D
		37	10	Thru	190	197	36.5	D
		37	10	Right	270	275	5.8	A
				OVERALL	540	538	22.2	C
	Northbound	35	10	Left	650	618	115.5	F
		35	10	Thru	860	829	44.2	D
		35	10	Right	470	519	15.2	B
				OVERALL	1,980	1,966	58.9	E
	Intersection Total				4,990	4,929	43.9	D

I-285/Atlanta Road IMR
2012 AM Peak Hour Level of Service
Build Alternate - Tight Diamond

Section	Direction	Type Section	CORSIM Nodes		2012 Volumes		Density (Veh./Lane/Mi.)	LOS
			A	B	Design	CORSIM		
I-285 Northbound South of South Cobb Drive	Northbound	Basic	54	12	6,790	6,787	27.70	D
I-285 Northbound South of South Cobb Drive Exit Ramp	Northbound	Merge/Diverge	12	14	6,790	6,779	31.63	D
I-285 Northbound Between South Cobb Drive Exit and Entrance Ramps	Northbound	Basic	14	13	6,120	6,086	25.30	D
I-285 Northbound North of South Cobb Drive Entrance Ramp	Northbound	Merge/Diverge	13	19	7,540	7,554	38.72	E
I-285 Northbound Between South Cobb Drive and Atlanta Road	Northbound	Basic	19	60	7,540	7,527	31.90	D
I-285 Northbound South of Atlanta Road Exit Ramp	Northbound	Merge/Diverge	60	21	7,540	7,524	34.57	D
I-285 Northbound Between Atlanta Road Exit and Entrance Ramps	Northbound	Basic	21	23	7,120	7,308	31.20	D
I-285 Northbound North of Atlanta Road Entrance Ramp	Northbound	Merge/Diverge	23	52	8,360	8,240	29.38	D
I-285 Northbound Between Atlanta Road and Paces Ferry Road	Northbound	Basic	52	62	8,360	8,227	29.90	D
I-285 Northbound South of Paces Ferry Road Exit Ramp	Northbound	Merge/Diverge	62	25	8,360	8,216	45.07	F
I-285 Northbound Between Paces Ferry Road Exit and Entrance Ramps	Northbound	Basic	25	39	7,570	7,397	31.20	D
I-285 Northbound North of Paces Ferry Road Entrance Ramp	Northbound	Merge/Diverge	39	42	8,800	8,482	45.24	F
I-285 Northbound Between Paces Ferry Road and Cobb Parkway Road	Northbound	Basic	42	57	8,800	8,469	36.00	E
I-285 Southbound Between Cobb Parkway and Paces Ferry Road	Southbound	Basic	56	43	8,500	8,498	34.90	D
I-285 Southbound North of Paces Ferry Road Exit Ramp	Southbound	Merge/Diverge	43	38	8,500	8,491	40.48	E
I-285 Southbound Between Paces Ferry Road Exit and Entrance Ramps	Southbound	Basic	38	26	6,920	7,064	29.70	D
I-285 Southbound South of Paces Ferry Road Entrance Ramp	Southbound	Merge/Diverge	26	63	7,360	7,512	27.20	C
I-285 Southbound Between Paces Ferry Road and Atlanta Road	Southbound	Basic	63	51	7,360	7,507	26.90	D
I-285 Southbound North of Atlanta Road Exit Ramp	Southbound	Merge/Diverge	51	24	7,360	7,518	38.69	E
I-285 Southbound Between Atlanta Road Exit and Entrance Ramps	Southbound	Basic	24	74	6,560	6,651	30.40	D
I-285 Southbound South of Atlanta Road Entrance Ramp	Southbound	Merge/Diverge	22	61	7,200	7,314	34.75	D
I-285 Southbound Between Atlanta Road and South Cobb Drive	Southbound	Basic	61	20	7,200	7,302	33.50	D
I-285 Southbound North of South Cobb Drive Exit Ramp	Southbound	Merge/Diverge	20	11	7,200	7,308	34.64	D
I-285 Southbound Between South Cobb Drive Exit and Entrance Ramps	Southbound	Basic	11	15	6,210	6,234	27.10	D
I-285 Southbound South of South Cobb Drive Entrance Ramp	Southbound	Merge/Diverge	15	16	7,500	7,558	38.11	E
I-285 Southbound South of South Cobb Drive	Southbound	Basic	16	55	7,500	7,553	37.40	E

I-285/Atlanta Road IMR
2012 PM Peak Hour Level of Service
Build Alternate - Tight Diamond

Section	Direction	Type Section	CORSIM Nodes		2012 Volumes		Density (Veh./Lane/Mi.)	LOS
			A	B	Design	CORSIM		
I-285 Northbound South of South Cobb Drive	Northbound	Basic	54	12	5,500	5,499	22.50	C
I-285 Northbound South of South Cobb Drive Exit Ramp	Northbound	Merge/Diverge	12	14	5,500	5,493	24.30	C
I-285 Northbound Between South Cobb Drive Exit and Entrance Ramps	Northbound	Basic	14	13	4,550	4,531	18.20	C
I-285 Northbound North of South Cobb Drive Entrance Ramp	Northbound	Merge/Diverge	13	19	5,510	5,537	27.27	C
I-285 Northbound Between South Cobb Drive and Atlanta Road	Northbound	Basic	19	60	5,510	5,525	22.50	C
I-285 Northbound South of Atlanta Road Exit Ramp	Northbound	Merge/Diverge	60	21	5,510	5,526	24.79	C
I-285 Northbound Between Atlanta Road Exit and Entrance Ramps	Northbound	Basic	21	73	4,900	4,845	19.50	C
I-285 Northbound North of Atlanta Road Entrance Ramp	Northbound	Merge/Diverge	23	52	5,550	5,476	20.05	C
I-285 Northbound Between Atlanta Road and Paces Ferry Road	Northbound	Basic	52	62	5,550	5,471	17.70	C
I-285 Northbound South of Paces Ferry Road Exit Ramp	Northbound	Merge/Diverge	62	25	5,550	5,464	26.04	C
I-285 Northbound Between Paces Ferry Road Exit and Entrance Ramps	Northbound	Basic	25	39	4,990	4,894	19.70	C
I-285 Northbound North of Paces Ferry Road Entrance Ramp	Northbound	Merge/Diverge	39	42	6,400	6,263	34.24	D
I-285 Northbound Between Paces Ferry Road and Cobb Parkway Road	Northbound	Basic	42	57	6,400	6,256	25.60	D
I-285 Southbound Between Cobb Parkway and Paces Ferry Road	Southbound	Basic	56	43	8,630	8,625	35.40	E
I-285 Southbound North of Paces Ferry Road Exit Ramp	Southbound	Merge/Diverge	43	38	8,630	8,622	42.13	E
I-285 Southbound Between Paces Ferry Road Exit and Entrance Ramps	Southbound	Basic	38	26	7,390	7,537	31.80	D
I-285 Southbound South of Paces Ferry Road Entrance Ramp	Southbound	Merge/Diverge	26	63	8,230	8,381	30.08	D
I-285 Southbound Between Paces Ferry Road and Atlanta Road	Southbound	Basic	63	51	8,230	8,378	35.30	E
I-285 Southbound North of Atlanta Road Exit Ramp	Southbound	Merge/Diverge	51	24	8,230	8,369	52.86	F
I-285 Southbound Between Atlanta Road Exit and Entrance Ramps	Southbound	Basic	24	74	7,030	7,084	33.80	D
I-285 Southbound South of Atlanta Road Entrance Ramp	Southbound	Merge/Diverge	22	61	7,450	7,524	30.05	D
I-285 Southbound Between Atlanta Road and South Cobb Drive	Southbound	Basic	61	20	7,450	7,502	34.00	D
I-285 Southbound North of South Cobb Drive Exit Ramp	Southbound	Merge/Diverge	20	11	7,450	7,500	37.08	E
I-285 Southbound Between South Cobb Drive Exit and Entrance Ramps	Southbound	Basic	11	15	6,440	6,441	28.40	D
I-285 Southbound South of South Cobb Drive Entrance Ramp	Southbound	Merge/Diverge	15	16	7,200	7,258	29.25	D
I-285 Southbound South of South Cobb Drive	Southbound	Basic	16	55	7,200	7,270	31.80	D

I-285/Atlanta Road
2012 PM Peak Hour Intersection Level of Service
Build Alternate -Tight Diamond

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2012 PM Volumes Design	2012 PM Volumes CORSIM	Delay (Sec/Veh)	LOS
South Cobb Drive at I-285 Southbound Ramps (Signalized)	Eastbound	32	1	Thru	1,160	1,152	20.3	C
		32	1	Right	710	713	5.2	A
				OVERALL	1,870	1,865	14.5	B
	Westbound	2	1	Left	50	108	59.4	E
		2	1	Thru	1,360	1,310	18.5	B
				OVERALL	1,410	1,418	21.6	C
	Southbound	7003	1	Left	380	339	34.6	C
		7003	1	Right	630	722	38.6	D
				OVERALL	1,010	1,061	37.3	D
	Intersection Total				4,290	4,344	22.4	C
South Cobb Drive at I-285 Northbound Ramps (Signalized)	Eastbound	1	2	Left	730	764	41.1	D
		1	2	Thru	810	727	31.1	C
				OVERALL	1,540	1,491	36.2	D
	Westbound	33	2	Thru	490	487	36.5	D
		33	2	Right	230	237	5.5	A
				OVERALL	720	724	26.4	C
	Northbound	7001	2	Left	900	935	26.7	C
		7001	2	Right	50	43	4.9	A
				OVERALL	950	978	25.7	C
	Intersection Total				3,210	3,193	30.8	C
Atlanta Road at Cumberland Parkway (Signalized)	Eastbound	41	3	Left	190	198	49.1	D
		41	3	Thru	320	325	41.7	D
		41	3	Right	330	318	2.9	A
				OVERALL	840	841	28.8	C
	Westbound	31	3	Left	130	115	97.9	F
		31	3	Thru	740	739	116.7	F
		31	3	Right	50	38	44.4	D
				OVERALL	920	892	111.2	F
	Southbound	40	3	Left	70	74	21.1	C
		40	3	Thru	540	533	26.0	C
		40	3	Right	540	407	16.7	B
				OVERALL	1,150	1,014	21.9	C
	Northbound	4	3	Left	940	947	68.9	E
		4	3	Thru	1,240	1,275	34.3	C
		4	3	Right	90	109	16.9	B
				OVERALL	2,270	2,331	47.6	D
	Intersection Total				5,180	5,078	50.5	D
Atlanta Road at West Atlanta Road (Unsignalized)	Eastbound	47	4	Right	80	79	5.4	A
				OVERALL	80	79	5.4	A
	Westbound	48	4	Right	10	9	6.0	A
				OVERALL	10	9	6.0	A
	Southbound	3	4	Thru	750	721	0.1	A
		3	4	Right	250	245	2.0	A
				OVERALL	1,000	966	0.6	A
	Northbound	65	4	Thru	2,260	2,317	0.1	A
		65	4	Right	10	0	0.0	A
				OVERALL	2,270	2,317	0.1	A
	Intersection Total				1,090	1,054	1.2	A

I-285/Atlanta Road
2012 PM Peak Hour Intersection Level of Service
Build Alternate -Tight Diamond

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2012 PM Volumes Design	2012 PM Volumes CORSIM	Delay (Sec/Veh)	LOS
Atlanta Road at Pine Street (Signalized)	Eastbound	66	65	Left	280	283	62.8	E
		66	65	Thru	10	8	46.5	D
		66	65	Right	120	116	7.9	A
				OVERALL	410	407	46.8	D
	Westbound	67	65	Left	10	13	60.5	E
		67	65	Thru	10	10	63.0	E
		67	65	Right	10	7	10.3	B
				OVERALL	30	30	49.6	D
	Southbound	4	65	Left	10	6	10.0	A
		4	65	Thru	730	716	22.2	C
		4	65	Right	90	78	4.9	A
				OVERALL	830	800	20.5	C
	Northbound	5	65	Left	590	621	62.6	E
		5	65	Thru	1,980	2,031	26.9	C
		5	65	Right	10	0	0.0	A
				OVERALL	2,580	2,652	35.3	D
	Intersection Total				3,850	3,889	33.5	C
Atlanta Road at I-285 Southbound Ramps (Signalized)	Eastbound	65	5	Thru	630	616	30.8	C
		65	5	Right	230	230	6.1	A
				OVERALL	860	846	24.1	C
	Westbound	6	5	Left	190	201	8.8	A
		6	5	Thru	1,780	1,824	1.4	A
				OVERALL	1,970	2,025	2.2	A
	Southbound	68	5	Left	400	454	45.6	D
		68	5	Right	800	828	6.3	A
				OVERALL	1,200	1,282	20.2	C
	Intersection Total				4,030	4,153	12.2	B
Atlanta Road at I-285 Northbound Ramps (Signalized)	Eastbound	5	6	Left	270	258	40.0	D
		5	6	Thru	810	811	1.8	A
				OVERALL	1,080	1,069	11.0	B
	Westbound	7	6	Thru	1,580	1,589	9.8	A
		7	6	Right	380	371	3.3	A
				OVERALL	1,960	1,960	8.5	A
	Northbound	45	6	Left	390	437	47.6	D
		45	6	Right	220	244	7.9	A
				OVERALL	610	681	33.4	C
	Intersection Total				3,650	3,710	13.8	B
Atlanta Road at Brownwood Lane (Signalized)	Eastbound	6	7	Left	160	145	30.9	C
		6	7	Thru	870	910	8.4	A
				OVERALL	1,030	1,055	11.5	B
	Westbound	44	7	Thru	1,740	1,743	14.3	B
		44	7	Right	30	26	4.2	A
				OVERALL	1,770	1,769	14.2	B
	Southbound	46	7	Left	30	34	49.4	D
		46	7	Right	220	215	28.1	C
				OVERALL	250	249	31.0	C
	Intersection Total				3,050	3,073	14.6	B

I-285/Atlanta Road
2012 PM Peak Hour Intersection Level of Service
Build Alternate -Tight Diamond

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2012 PM Volumes Design	2012 PM Volumes CORSIM	Delay (Sec/Veh)	LOS
Paces Ferry Road at I-285 Southbound Ramps (Signalized)	Eastbound	34	8	Thru	1,090	1,064	18.7	B
		34	8	Right	350	358	4.8	A
				OVERALL	1,440	1,422	15.2	B
	Westbound	9	8	Left	490	500	60.6	E
		9	8	Thru	750	780	3.1	A
				OVERALL	1,240	1,280	25.6	C
	Southbound	7012	8	Left	480	423	33.9	C
		7012	8	Right	760	686	7.6	A
				OVERALL	1,240	1,109	17.6	B
	Intersection Total				3,920	3,811	19.4	B
Paces Ferry Road at I-285 Northbound Ramps (Signalized)	Eastbound	8	9	Left	440	405	25.1	C
		8	9	Thru	1,130	1,087	7.9	A
				OVERALL	1,570	1,492	12.5	B
	Westbound	10	9	Thru	990	1,008	19.2	B
		10	9	Right	970	966	7.1	A
				OVERALL	1,960	1,974	13.3	B
	Northbound	49	9	Left	250	260	40.9	D
		49	9	Right	210	249	9.3	A
				OVERALL	460	509	25.5	C
	Intersection Total				3,990	3,975	14.6	B
Paces Ferry Road at Cumberland Parkway (Signalized)	Eastbound	9	10	Left	250	260	48.1	D
		9	10	Thru	560	540	46.1	D
		9	10	Right	530	542	22.7	C
				OVERALL	1,340	1,342	37.1	D
	Westbound	36	10	Left	320	324	42.1	D
		36	10	Thru	1,050	1,054	52.2	D
		36	10	Right	120	109	55.3	E
				OVERALL	1,490	1,487	50.2	D
	Southbound	37	10	Left	140	132	66.8	E
		37	10	Thru	1,610	1,605	30.9	C
		37	10	Right	500	516	11.8	B
				OVERALL	2,250	2,253	28.6	C
	Northbound	35	10	Left	410	398	61.4	E
		35	10	Thru	480	474	20.3	C
		35	10	Right	260	282	5.4	A
				OVERALL	1,150	1,154	30.8	C
	Intersection Total				6,230	6,236	36.0	D

I-285/Atlanta Road
2012 AM Peak Hour Intersection Level of Service
No Build Alternate

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2012 AM Volumes Design	2012 AM Volumes CORSIM	Delay (Sec/Veh)	LOS
South Cobb Drive at I-285 Southbound Ramps (Signalized)	Eastbound	32	1	Thru	1,280	1,248	22.4	C
		32	1	Right	1,190	1,209	13.3	B
				OVERALL	2,470	2,457	17.9	B
	Westbound	2	1	Left	100	100	35.8	D
		2	1	Thru	1,000	1,019	9.3	A
				OVERALL	1,100	1,119	11.7	B
	Southbound	7003	1	Left	240	253	29.5	C
		7003	1	Right	750	747	18.0	B
				OVERALL	990	1,000	20.9	C
	Intersection Total				4,560	4,576	17.0	B
South Cobb Drive at I-285 Northbound Ramps (Signalized)	Eastbound	1	2	Left	870	850	38.2	D
		1	2	Thru	650	648	26.5	C
				OVERALL	1,520	1,498	33.2	C
	Westbound	33	2	Thru	450	462	33.5	C
		33	2	Right	550	533	9.1	A
				OVERALL	1,000	995	20.4	C
	Northbound	7001	2	Left	650	650	31.7	C
		7001	2	Right	20	18	6.0	A
				OVERALL	670	668	31.0	C
	Intersection Total				3,190	3,161	28.7	C
Atlanta Road at Cumberland Parkway (Signalized)	Eastbound	41	3	Left	220	214	123.0	F
		41	3	Thru	950	792	143.9	F
		41	3	Right	1,000	829	93.7	F
				OVERALL	2,170	1,835	118.8	F
	Westbound	31	3	Left	120	77	743.5	F
		31	3	Thru	220	217	34.4	C
		31	3	Right	40	48	6.0	A
				OVERALL	380	342	190.1	F
	Southbound	40	3	Left	150	137	108.3	F
		40	3	Thru	1,100	1,056	146.8	F
		40	3	Right	180	104	105.4	F
				OVERALL	1,430	1,297	139.4	F
	Northbound	4	3	Left	320	300	31.3	C
		4	3	Thru	590	611	33.0	C
		4	3	Right	150	133	10.4	B
				OVERALL	1,060	1,044	29.6	C
	Intersection Total				3,980	3,474	142.4	F
Atlanta Road at West Atlanta Road (Unsignalized)	Eastbound	47	4	Right	130	14	4817.6	F
				OVERALL	130	14	4817.6	F
	Westbound	48	4	Right	10	29	7.0	A
				OVERALL	10	29	7.0	A
	Southbound	3	4	Thru	2,170	1,851	111.5	F
		3	4	Right	50	41	91.9	F
				OVERALL	2,220	1,892	111.1	F
	Northbound	65	4	Thru	1,050	1,025	0.0	A
		65	4	Right	10	11	1.1	A
				OVERALL	1,060	1,036	0.0	A
	Intersection Total				2,360	1,935	143.6	F

I-285/Atlanta Road
2012 AM Peak Hour Intersection Level of Service
No Build Alternate

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2012 AM Volumes Design	2012 AM Volumes CORSIM	Delay (Sec/Veh)	LOS
Atlanta Road at Pine Street (Signalized)	Eastbound	66	65	Left	190	179	89.2	F
		66	65	Thru	0	0	0.0	A
		66	65	Right	100	111	40.9	D
				OVERALL	290	290	70.7	E
	Westbound	67	65	Left	10	13	118.2	F
		67	65	Thru	10	11	176.2	F
		67	65	Right	10	6	54.0	D
				OVERALL	30	30	126.6	F
	Southbound	4	65	Left	10	0	0.0	A
		4	65	Thru	2,270	1,805	67.7	E
		4	65	Right	20	17	19.8	B
				OVERALL	2,300	1,822	67.3	E
	Northbound	5	65	Left	170	181	57.3	E
		5	65	Thru	860	851	11.2	B
		5	65	Right	10	11	2.7	A
				OVERALL	1,040	1,043	19.2	B
	Intersection Total				2,620	2,142	77.9	E
Atlanta Road at I-285 Southbound Ramps (Signalized)	Eastbound	65	5	Thru	1,910	1,486	138.8	F
		65	5	Right	470	400	55.1	E
				OVERALL	2,380	1,886	121.0	F
	Westbound	6	5	Left	170	179	72.4	E
		6	5	Thru	570	571	5.4	A
				OVERALL	740	750	21.4	C
	Southbound	68	5	Left	330	346	42.9	D
		68	5	Right	470	471	2.5	A
				OVERALL	800	817	19.6	B
	Intersection Total				3,920	3,453	75.4	E
Atlanta Road at I-285 Northbound Ramps (Signalized)	Eastbound	5	6	Left	790	602	32.1	C
		5	6	Thru	1,450	1,236	14.3	B
				OVERALL	2,240	1,838	20.2	C
	Westbound	7	6	Thru	500	503	49.6	D
		7	6	Right	450	424	43.4	D
				OVERALL	950	927	46.8	D
	Northbound	7006	6	Left	240	243	44.9	D
		7006	6	Right	180	168	9.3	A
				OVERALL	420	411	30.3	C
	Intersection Total				3,610	3,176	29.2	C

I-285/Atlanta Road
2012 AM Peak Hour Intersection Level of Service
No Build Alternate

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2012 AM Volumes Design	2012 AM Volumes CORSIM	Delay (Sec/Veh)	LOS
Atlanta Road at Brownwood Lane (Signalized)	Eastbound	6	7	Left	190	155	14.4	B
		6	7	Thru	1,430	1,229	14.4	B
		6	7	Right	10	14	9.9	A
				OVERALL	1,630	1,398	14.3	B
	Westbound	44	7	Left	10	10	21.6	C
		44	7	Thru	720	721	11.3	B
		44	7	Right	20	25	13.4	B
				OVERALL	750	756	11.5	B
	Southbound	46	7	Left	20	16	26.3	C
		46	7	Thru	10	19	28.1	C
		46	7	Right	220	213	9.3	A
				OVERALL	250	248	11.8	B
	Northbound	45	7	Left	10	6	24.0	C
		45	7	Thru	0	0	0.0	A
		45	7	Right	10	13	9.7	A
				OVERALL	20	19	14.2	B
	Intersection Total				2,630	2,402	13.3	B
Paces Ferry Road at I-285 Southbound Ramps (Signalized)	Eastbound	34	8	Thru	1,260	1,231	19.1	B
		34	8	Right	220	234	3.4	A
				OVERALL	1,480	1,465	16.6	B
	Westbound	9	8	Left	220	237	50.4	D
		9	8	Thru	670	703	3.4	A
				OVERALL	890	940	15.2	B
	Southbound	7012	8	Left	620	528	37.2	D
		7012	8	Right	960	843	7.6	A
				OVERALL	1,580	1,371	19.0	B
	Intersection Total				3,950	3,776	17.1	B
Paces Ferry Road at I-285 Northbound Ramps (Signalized)	Eastbound	8	9	Left	500	473	28.8	C
		8	9	Thru	1,380	1,301	9.1	A
				OVERALL	1,880	1,774	14.3	B
	Westbound	10	9	Thru	650	678	16.6	B
		10	9	Right	730	664	5.6	A
				OVERALL	1,380	1,342	11.2	B
	Northbound	49	9	Left	240	251	40.0	D
		49	9	Right	420	409	11.1	B
				OVERALL	660	660	22.1	C
	Intersection Total				3,920	3,776	14.6	B
Paces Ferry Road at Cumberland Parkway (Signalized)	Eastbound	9	10	Left	490	495	51.0	D
		9	10	Thru	1,090	1,010	33.7	C
		9	10	Right	220	212	4.3	A
				OVERALL	1,800	1,717	35.1	C
	Westbound	36	10	Left	140	142	53.4	D
		36	10	Thru	460	441	25.3	C
		36	10	Right	70	77	24.3	C
				OVERALL	670	660	31.2	C
	Southbound	37	10	Left	80	66	41.2	D
		37	10	Thru	190	198	33.9	C
		37	10	Right	270	274	5.4	A
				OVERALL	540	538	20.3	C
	Northbound	35	10	Left	650	626	54.8	D
		35	10	Thru	860	823	64.6	E
		35	10	Right	470	521	29.0	C
				OVERALL	1,980	1,970	52.1	D
	Intersection Total				4,990	4,885	39.8	D

I-285/Atlanta Road IMR
2012 AM Peak Hour Level of Service
No Build

Section	Direction	Type Section	CORSIM Nodes		2012 Volumes		Density (Veh./Lane/Mi.)	LOS
			A	B	Design	CORSIM		
I-285 Northbound South of South Cobb Drive	Northbound	Basic	54	12	6,790	6,784	27.60	D
I-285 Northbound South of South Cobb Drive Exit Ramp	Northbound	Merge/Diverge	12	14	6,790	6,784	28.67	D
I-285 Northbound Between South Cobb Drive Exit and Entrance Ramps	Northbound	Basic	14	13	6,120	6,121	25.10	D
I-285 Northbound North of South Cobb Drive Entrance Ramp	Northbound	Merge/Diverge	13	19	7,540	7,497	37.66	E
I-285 Northbound Between South Cobb Drive and Atlanta Road	Northbound	Basic	19	60	7,540	7,507	31.40	D
I-285 Northbound South of Atlanta Road Exit Ramp	Northbound	Merge/Diverge	60	21	7,540	7,508	33.36	D
I-285 Northbound Between Atlanta Road Exit and Entrance Ramps	Northbound	Basic	21	23	7,120	7,082	29.30	D
I-285 Northbound North of Atlanta Road Entrance Ramp	Northbound	Merge/Diverge	23	52	8,360	8,116	40.77	E
I-285 Northbound Between Atlanta Road and Paces Ferry Road	Northbound	Basic	52	62	8,360	8,128	35.90	E
I-285 Northbound South of Paces Ferry Road Exit Ramp	Northbound	Merge/Diverge	62	25	8,360	8,129	37.70	E
I-285 Northbound Between Paces Ferry Road Exit and Entrance Ramps	Northbound	Basic	25	39	7,570	7,366	30.70	D
I-285 Northbound North of Paces Ferry Road Entrance Ramp	Northbound	Merge/Diverge	39	42	8,800	8,476	43.86	F
I-285 Northbound Between Paces Ferry Road and Cobb Parkway Road	Northbound	Basic	42	57	8,800	8,477	35.70	E
I-285 Southbound Between Cobb Parkway Road and Paces Ferry Road	Southbound	Basic	56	43	8,500	8,491	34.70	D
I-285 Southbound North of Paces Ferry Road Exit Ramp	Southbound	Merge/Diverge	43	38	8,500	8,490	39.14	E
I-285 Southbound Between Paces Ferry Road Exit and Entrance Ramps	Southbound	Basic	38	26	6,920	7,113	30.30	D
I-285 Southbound South of Paces Ferry Road Entrance Ramp	Southbound	Merge/Diverge	26	63	7,360	7,588	42.85	E
I-285 Southbound Between Paces Ferry Road and Atlanta Road	Southbound	Basic	63	51	7,360	7,595	40.20	E
I-285 Southbound North of Atlanta Road Exit Ramp	Southbound	Merge/Diverge	51	24	7,360	7,596	34.07	D
I-285 Southbound Between Atlanta Road Exit and Entrance Ramps	Southbound	Basic	24	22	6,560	6,776	29.20	D
I-285 Southbound South of Atlanta Road Entrance Ramp	Southbound	Merge/Diverge	22	61	7,200	7,350	30.23	D
I-285 Southbound Between Atlanta Road and South Cobb Drive	Southbound	Basic	61	20	7,200	7,366	31.90	D
I-285 Southbound North of South Cobb Drive Exit Ramp	Southbound	Merge/Diverge	20	11	7,200	7,356	30.39	D
I-285 Southbound Between South Cobb Drive Exit and Entrance Ramps	Southbound	Basic	11	15	6,210	6,331	31.20	D
I-285 Southbound South of South Cobb Drive Entrance Ramp	Southbound	Merge/Diverge	15	16	7,500	7,639	43.50	F
I-285 Southbound South of South Cobb Drive	Southbound	Basic	16	55	7,500	7,632	37.80	E

I-285/Atlanta Road IMR
2012 PM Peak Hour Level of Service
No Build

Section	Direction	Type Section	CORSIM Nodes		2012 Volumes		Density (Veh./Lane/Mi.)	LOS
			A	B	Design	CORSIM		
I-285 Northbound South of South Cobb Drive	Northbound	Basic	54	12	5,500	5,498	22.40	C
I-285 Northbound South of South Cobb Drive Exit Ramp	Northbound	Merge/Diverge	12	14	5,500	5,483	22.96	C
I-285 Northbound Between South Cobb Drive Exit and Entrance Ramps	Northbound	Basic	14	13	4,550	4,556	18.30	C
I-285 Northbound North of South Cobb Drive Entrance Ramp	Northbound	Merge/Diverge	13	19	5,510	5,511	26.52	C
I-285 Northbound Between South Cobb Drive and Atlanta Road	Northbound	Basic	19	60	5,510	5,517	22.50	C
I-285 Northbound South of Atlanta Road Exit Ramp	Northbound	Merge/Diverge	60	21	5,510	5,505	24.18	C
I-285 Northbound Between Atlanta Road Exit and Entrance Ramps	Northbound	Basic	21	23	4,900	4,875	19.70	C
I-285 Northbound North of Atlanta Road Entrance Ramp	Northbound	Merge/Diverge	23	52	5,550	5,499	25.86	C
I-285 Northbound Between Atlanta Road and Paces Ferry Road	Northbound	Basic	52	62	5,550	5,503	22.30	C
I-285 Northbound South of Paces Ferry Road Exit Ramp	Northbound	Merge/Diverge	62	25	5,550	5,495	24.62	C
I-285 Northbound Between Paces Ferry Road Exit and Entrance Ramps	Northbound	Basic	25	39	4,990	4,959	20.00	C
I-285 Northbound North of Paces Ferry Road Entrance Ramp	Northbound	Merge/Diverge	39	42	6,400	6,265	33.73	D
I-285 Northbound Between Paces Ferry Road and Cobb Parkway Road	Northbound	Basic	42	57	6,400	6,264	25.50	D
I-285 Southbound Between Cobb Parkway Road and Paces Ferry Road	Southbound	Basic	56	43	8,630	8,618	35.90	E
I-285 Southbound North of Paces Ferry Road Exit Ramp	Southbound	Merge/Diverge	43	38	8,630	8,607	48.15	F
I-285 Southbound Between Paces Ferry Road Exit and Entrance Ramps	Southbound	Basic	38	26	7,390	7,473	67.40	F
I-285 Southbound South of Paces Ferry Road Entrance Ramp	Southbound	Merge/Diverge	26	63	8,230	8,176	68.10	F
I-285 Southbound Between Paces Ferry Road and Atlanta Road	Southbound	Basic	63	51	8,230	8,154	46.70	F
I-285 Southbound North of Atlanta Road Exit Ramp	Southbound	Merge/Diverge	51	24	8,230	8,149	35.60	E
I-285 Southbound Between Atlanta Road Exit and Entrance Ramps	Southbound	Basic	24	22	7,030	6,994	30.20	D
I-285 Southbound South of Atlanta Road Entrance Ramp	Southbound	Merge/Diverge	22	61	7,450	7,444	27.86	C
I-285 Southbound Between Atlanta Road and South Cobb Drive	Southbound	Basic	61	20	7,450	7,459	32.20	D
I-285 Southbound North of South Cobb Drive Exit Ramp	Southbound	Merge/Diverge	20	11	7,450	7,454	29.30	D
I-285 Southbound Between South Cobb Drive Exit and Entrance Ramps	Southbound	Basic	11	15	6,440	6,450	27.40	D
I-285 Southbound South of South Cobb Drive Entrance Ramp	Southbound	Merge/Diverge	15	16	7,200	7,208	30.01	D
I-285 Southbound South of South Cobb Drive	Southbound	Basic	16	55	7,200	7,193	32.10	D

I-285/Atlanta Road IMR
2012 AM Peak Hour Level of Service
No Build

Section	Direction	Type Section	CORSIM Nodes		2012 Volumes		Density (Veh./Lane/Mi.)	LOS
			A	B	Design	CORSIM		
I-285 Northbound South of South Cobb Drive	Northbound	Basic	54	12	6,790	6,784	27.60	D
I-285 Northbound South of South Cobb Drive Exit Ramp	Northbound	Merge/Diverge	12	14	6,790	6,784	28.67	D
I-285 Northbound Between South Cobb Drive Exit and Entrance Ramps	Northbound	Basic	14	13	6,120	6,121	25.10	D
I-285 Northbound North of South Cobb Drive Entrance Ramp	Northbound	Merge/Diverge	13	19	7,540	7,497	37.66	E
I-285 Northbound Between South Cobb Drive and Atlanta Road	Northbound	Basic	19	60	7,540	7,507	31.40	D
I-285 Northbound South of Atlanta Road Exit Ramp	Northbound	Merge/Diverge	60	21	7,540	7,508	33.36	D
I-285 Northbound Between Atlanta Road Exit and Entrance Ramps	Northbound	Basic	21	23	7,120	7,082	29.30	D
I-285 Northbound North of Atlanta Road Entrance Ramp	Northbound	Merge/Diverge	23	52	8,360	8,116	40.77	E
I-285 Northbound Between Atlanta Road and Paces Ferry Road	Northbound	Basic	52	62	8,360	8,128	35.90	E
I-285 Northbound South of Paces Ferry Road Exit Ramp	Northbound	Merge/Diverge	62	25	8,360	8,129	37.70	E
I-285 Northbound Between Paces Ferry Road Exit and Entrance Ramps	Northbound	Basic	25	39	7,570	7,366	30.70	D
I-285 Northbound North of Paces Ferry Road Entrance Ramp	Northbound	Merge/Diverge	39	42	8,800	8,476	43.86	F
I-285 Northbound Between Paces Ferry Road and Cobb Parkway Road	Northbound	Basic	42	57	8,800	8,477	35.70	E
I-285 Southbound Between Cobb Parkway Road and Paces Ferry Road	Southbound	Basic	56	43	8,500	8,491	34.70	D
I-285 Southbound North of Paces Ferry Road Exit Ramp	Southbound	Merge/Diverge	43	38	8,500	8,490	39.14	E
I-285 Southbound Between Paces Ferry Road Exit and Entrance Ramps	Southbound	Basic	38	26	6,920	7,113	30.30	D
I-285 Southbound South of Paces Ferry Road Entrance Ramp	Southbound	Merge/Diverge	26	63	7,360	7,588	42.85	E
I-285 Southbound Between Paces Ferry Road and Atlanta Road	Southbound	Basic	63	51	7,360	7,595	40.20	E
I-285 Southbound North of Atlanta Road Exit Ramp	Southbound	Merge/Diverge	51	24	7,360	7,596	34.07	D
I-285 Southbound Between Atlanta Road Exit and Entrance Ramps	Southbound	Basic	24	22	6,560	6,776	29.20	D
I-285 Southbound South of Atlanta Road Entrance Ramp	Southbound	Merge/Diverge	22	61	7,200	7,350	30.23	D
I-285 Southbound Between Atlanta Road and South Cobb Drive	Southbound	Basic	61	20	7,200	7,366	31.90	D
I-285 Southbound North of South Cobb Drive Exit Ramp	Southbound	Merge/Diverge	20	11	7,200	7,356	30.39	D
I-285 Southbound Between South Cobb Drive Exit and Entrance Ramps	Southbound	Basic	11	15	6,210	6,331	31.20	D
I-285 Southbound South of South Cobb Drive Entrance Ramp	Southbound	Merge/Diverge	15	16	7,500	7,639	43.50	F
I-285 Southbound South of South Cobb Drive	Southbound	Basic	16	55	7,500	7,632	37.80	E

I-285/Atlanta Road IMR
2012 PM Peak Hour Level of Service
No Build

Section	Direction	Type Section	CORSIM Nodes		2012 Volumes		Density (Veh./Lane/Mi.)	LOS
			A	B	Design	CORSIM		
I-285 Northbound South of South Cobb Drive	Northbound	Basic	54	12	5,500	5,498	22.40	C
I-285 Northbound South of South Cobb Drive Exit Ramp	Northbound	Merge/Diverge	12	14	5,500	5,483	22.96	C
I-285 Northbound Between South Cobb Drive Exit and Entrance Ramps	Northbound	Basic	14	13	4,550	4,556	18.30	C
I-285 Northbound North of South Cobb Drive Entrance Ramp	Northbound	Merge/Diverge	13	19	5,510	5,511	26.52	C
I-285 Northbound Between South Cobb Drive and Atlanta Road	Northbound	Basic	19	60	5,510	5,517	22.50	C
I-285 Northbound South of Atlanta Road Exit Ramp	Northbound	Merge/Diverge	60	21	5,510	5,505	24.18	C
I-285 Northbound Between Atlanta Road Exit and Entrance Ramps	Northbound	Basic	21	23	4,900	4,875	19.70	C
I-285 Northbound North of Atlanta Road Entrance Ramp	Northbound	Merge/Diverge	23	52	5,550	5,499	25.86	C
I-285 Northbound Between Atlanta Road and Paces Ferry Road	Northbound	Basic	52	62	5,550	5,503	22.30	C
I-285 Northbound South of Paces Ferry Road Exit Ramp	Northbound	Merge/Diverge	62	25	5,550	5,495	24.62	C
I-285 Northbound Between Paces Ferry Road Exit and Entrance Ramps	Northbound	Basic	25	39	4,990	4,959	20.00	C
I-285 Northbound North of Paces Ferry Road Entrance Ramp	Northbound	Merge/Diverge	39	42	6,400	6,265	33.73	D
I-285 Northbound Between Paces Ferry Road and Cobb Parkway Road	Northbound	Basic	42	57	6,400	6,264	25.50	D
I-285 Southbound Between Cobb Parkway Road and Paces Ferry Road	Southbound	Basic	56	43	8,630	8,618	35.90	E
I-285 Southbound North of Paces Ferry Road Exit Ramp	Southbound	Merge/Diverge	43	38	8,630	8,607	48.15	F
I-285 Southbound Between Paces Ferry Road Exit and Entrance Ramps	Southbound	Basic	38	26	7,390	7,473	67.40	F
I-285 Southbound South of Paces Ferry Road Entrance Ramp	Southbound	Merge/Diverge	26	63	8,230	8,176	68.10	F
I-285 Southbound Between Paces Ferry Road and Atlanta Road	Southbound	Basic	63	51	8,230	8,154	46.70	F
I-285 Southbound North of Atlanta Road Exit Ramp	Southbound	Merge/Diverge	51	24	8,230	8,149	35.60	E
I-285 Southbound Between Atlanta Road Exit and Entrance Ramps	Southbound	Basic	24	22	7,030	6,994	30.20	D
I-285 Southbound South of Atlanta Road Entrance Ramp	Southbound	Merge/Diverge	22	61	7,450	7,444	27.86	C
I-285 Southbound Between Atlanta Road and South Cobb Drive	Southbound	Basic	61	20	7,450	7,459	32.20	D
I-285 Southbound North of South Cobb Drive Exit Ramp	Southbound	Merge/Diverge	20	11	7,450	7,454	29.30	D
I-285 Southbound Between South Cobb Drive Exit and Entrance Ramps	Southbound	Basic	11	15	6,440	6,450	27.40	D
I-285 Southbound South of South Cobb Drive Entrance Ramp	Southbound	Merge/Diverge	15	16	7,200	7,208	30.01	D
I-285 Southbound South of South Cobb Drive	Southbound	Basic	16	55	7,200	7,193	32.10	D

I-285/Atlanta Road
2012 PM Peak Hour Intersection Level of Service
No Build Alternate

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2012 PM Volumes Design	2012 PM Volumes CORSIM	Delay (Sec/Veh)	LOS
South Cobb Drive at I-285 Southbound Ramps (Signalized)	Eastbound	32	1	Thru	1,160	1,150	20.0	B
		32	1	Right	710	714	5.2	A
				OVERALL	1,870	1,864	14.3	B
	Westbound	2	1	Left	50	57	19.8	B
		2	1	Thru	1,360	1,319	14.2	B
				OVERALL	1,410	1,376	14.4	B
	Southbound	7003	1	Left	380	351	27.9	C
		7003	1	Right	630	657	22.1	C
				OVERALL	1,010	1,008	24.1	C
	Intersection Total				4,290	4,248	16.7	B
South Cobb Drive at I-285 Northbound Ramps (Signalized)	Eastbound	1	2	Left	730	722	40.2	D
		1	2	Thru	810	782	26.3	C
				OVERALL	1,540	1,504	33.0	C
	Westbound	33	2	Thru	490	486	31.0	C
		33	2	Right	230	234	6.2	A
				OVERALL	720	720	22.9	C
	Northbound	7001	2	Left	900	891	31.9	C
		7001	2	Right	50	47	6.5	A
				OVERALL	950	938	30.6	C
	Intersection Total				3,210	3,162	30.0	C
Atlanta Road at Cumberland Parkway (Signalized)	Eastbound	41	3	Left	190	208	49.3	D
		41	3	Thru	320	335	46.4	D
		41	3	Right	330	299	2.9	A
				OVERALL	840	842	31.7	C
	Westbound	31	3	Left	130	134	76.4	E
		31	3	Thru	740	734	82.3	F
		31	3	Right	50	41	25.6	C
				OVERALL	920	909	78.9	E
	Southbound	40	3	Left	70	73	18.7	B
		40	3	Thru	540	531	24.0	C
		40	3	Right	400	404	14.2	B
				OVERALL	1,010	1,008	19.7	B
	Northbound	4	3	Left	940	887	74.9	E
		4	3	Thru	1,240	1,217	41.2	D
		4	3	Right	90	82	21.1	C
				OVERALL	2,270	2,186	54.1	D
	Intersection Total				5,040	4,945	47.8	D
Atlanta Road at West Atlanta Road (Unsignalized)	Eastbound	47	4	Right	80	79	5.2	A
				OVERALL	80	79	5.2	A
	Westbound	48	4	Right	10	10	8.4	A
				OVERALL	10	10	8.4	A
	Southbound	3	4	Thru	750	719	0.1	A
		3	4	Right	250	242	2.0	A
				OVERALL	1,000	961	0.6	A
	Northbound	65	4	Thru	2,260	2,185	0.0	A
		65	4	Right	10	0	0.0	A
				OVERALL	2,270	2,185	0.0	A
	Intersection Total				1,090	1,050	1.1	A

I-285/Atlanta Road
2012 PM Peak Hour Intersection Level of Service
No Build Alternate

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2012 PM Volumes Design	2012 PM Volumes CORSIM	Delay (Sec/Veh)	LOS
Atlanta Road at Pine Street (Signalized)	Eastbound	66	65	Left	280	245	154.7	F
		66	65	Thru	10	17	53.6	D
		66	65	Right	120	124	32.2	C
				OVERALL	410	386	110.9	F
	Westbound	67	65	Left	10	14	41.1	D
		67	65	Thru	10	11	58.9	E
		67	65	Right	10	6	21.0	C
				OVERALL	30	31	43.5	D
	Southbound	4	65	Left	10	7	18.0	B
		4	65	Thru	730	707	16.0	B
		4	65	Right	90	88	4.8	A
				OVERALL	830	802	14.8	B
	Northbound	5	65	Left	590	545	51.9	D
		5	65	Thru	1,980	1,934	23.3	C
		5	65	Right	10	0	0.0	A
				OVERALL	2,580	2,479	29.6	C
	Intersection Total				3,850	3,698	35.0	C
Atlanta Road at I-285 Southbound Ramps (Signalized)	Eastbound	65	5	Thru	630	629	23.7	C
		65	5	Right	230	214	5.6	A
				OVERALL	860	843	19.1	B
	Westbound	6	5	Left	190	247	18.1	B
		6	5	Thru	1,780	1,717	6.3	A
				OVERALL	1,970	1,964	7.8	A
	Southbound	68	5	Left	400	391	42.6	D
		68	5	Right	800	760	2.9	A
				OVERALL	1,200	1,151	16.4	B
	Intersection Total				4,030	3,958	12.7	B
Atlanta Road at I-285 Northbound Ramps (Signalized)	Eastbound	5	6	Left	270	256	32.1	C
		5	6	Thru	760	760	14.3	B
				OVERALL	1,030	1,016	18.8	B
	Westbound	7	6	Thru	1,580	1,585	49.6	D
		7	6	Right	380	362	43.4	D
				OVERALL	1,960	1,947	48.5	D
	Northbound	7006	6	Left	390	389	44.9	D
		7006	6	Right	220	230	9.3	A
				OVERALL	610	619	31.6	C
	Intersection Total				3,600	3,582	37.1	D

I-285/Atlanta Road
2012 PM Peak Hour Intersection Level of Service
No Build Alternate

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2012 PM Volumes Design	2012 PM Volumes CORSIM	Delay (Sec/Veh)	LOS
Atlanta Road at Brownwood Lane (Signalized)	Eastbound	6	7	Left	160	140	14.4	B
		6	7	Thru	810	843	14.4	B
		6	7	Right	10	12	9.9	A
				OVERALL	980	995	14.3	B
	Westbound	44	7	Left	10	19	21.6	C
		44	7	Thru	1,730	1,717	11.3	B
		44	7	Right	30	31	13.4	B
				OVERALL	1,770	1,767	11.5	B
	Southbound	46	7	Left	30	29	26.3	C
		46	7	Thru	10	7	28.1	C
		46	7	Right	220	214	9.3	A
				OVERALL	260	250	11.8	B
	Northbound	45	7	Left	10	10	24.0	C
		45	7	Thru	10	7	0.0	A
		45	7	Right	10	12	9.7	A
				OVERALL	30	29	12.3	B
	Intersection Total				3,040	3,041	12.4	B
Paces Ferry Road at I-285 Southbound Ramps (Signalized)	Eastbound	34	8	Thru	1,090	1,086	17.9	B
		34	8	Right	350	361	5.0	A
				OVERALL	1,440	1,447	14.7	B
	Westbound	9	8	Left	490	477	61.7	E
		9	8	Thru	750	760	3.2	A
				OVERALL	1,240	1,237	25.8	C
	Southbound	7012	8	Left	480	435	34.4	C
		7012	8	Right	760	667	8.4	A
				OVERALL	1,240	1,102	18.7	B
	Intersection Total				3,920	3,786	19.5	B
Paces Ferry Road at I-285 Northbound Ramps (Signalized)	Eastbound	8	9	Left	440	412	29.1	C
		8	9	Thru	1,130	1,094	7.3	A
				OVERALL	1,570	1,506	13.2	B
	Westbound	10	9	Thru	990	984	18.9	B
		10	9	Right	970	909	6.9	A
				OVERALL	1,960	1,893	13.2	B
	Northbound	49	9	Left	250	259	38.1	D
		49	9	Right	210	199	11.6	B
				OVERALL	460	458	26.6	C
	Intersection Total				3,990	3,857	14.8	B
Paces Ferry Road at Cumberland Parkway (Signalized)	Eastbound	9	10	Left	250	241	43.4	D
		9	10	Thru	560	522	59.0	E
		9	10	Right	530	532	24.1	C
				OVERALL	1,340	1,295	41.8	D
	Westbound	36	10	Left	320	304	140.3	F
		36	10	Thru	1,050	967	252.8	F
		36	10	Right	120	102	292.1	F
				OVERALL	1,490	1,373	230.8	F
	Southbound	37	10	Left	140	124	133.2	F
		37	10	Thru	1,610	1,567	102.0	F
		37	10	Right	500	515	65.6	E
				OVERALL	2,250	2,206	95.3	F
	Northbound	35	10	Left	410	398	64.5	E
		35	10	Thru	480	476	22.8	C
		35	10	Right	260	283	5.7	A
				OVERALL	1,150	1,157	32.9	C
	Intersection Total				6,230	6,031	102.7	F

I-285/Atlanta Road
2032 AM Peak Hour Intersection Level of Service
Build Alternate - Tight Diamond

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2032 AM Volumes Design	2032 AM Volumes CORSIM	Delay (Sec/Veh)	LOS
South Cobb Drive at I-285 Southbound Ramps (Signalized)	Eastbound	32	1	Thru	1,720	1,670	17.2	B
		32	1	Right	1,610	1,665	4.1	A
				OVERALL	3,330	3,335	10.7	B
	Westbound	2	1	Left	140	116	46.1	D
		2	1	Thru	1,280	1,304	11.6	B
				OVERALL	1,420	1,420	14.4	B
	Southbound	7003	1	Left	320	361	38.6	D
		7003	1	Right	1,010	1,103	15.9	B
				OVERALL	1,330	1,464	21.5	C
	Intersection Total				6,080	6,219	14.1	B
South Cobb Drive at I-285 Northbound Ramps (Signalized)	Eastbound	1	2	Left	1,170	1,125	48.0	D
		1	2	Thru	870	894	25.8	C
				OVERALL	2,040	2,019	38.2	D
	Westbound	33	2	Thru	560	568	38.9	D
		33	2	Right	750	744	18.9	B
				OVERALL	1,310	1,312	27.6	C
	Northbound	7001	2	Left	860	853	26.9	C
		7001	2	Right	30	30	5.0	A
				OVERALL	890	883	26.2	C
	Intersection Total				4,240	4,214	32.4	C
Atlanta Road at Cumberland Parkway (Signalized)	Eastbound	41	3	Left	300	284	98.4	F
		41	3	Thru	1,280	1,336	55.8	E
		41	3	Right	1,360	1,320	5.2	A
				OVERALL	2,940	2,940	37.2	D
	Westbound	31	3	Left	160	145	60.2	E
		31	3	Thru	300	317	35.6	D
		31	3	Right	60	59	5.7	A
				OVERALL	520	521	39.0	D
	Southbound	40	3	Left	200	194	62.8	E
		40	3	Thru	1,480	1,451	74.8	E
		40	3	Right	160	178	46.0	D
				OVERALL	1,840	1,823	70.8	E
	Northbound	4	3	Left	570	543	108.1	F
		4	3	Thru	680	711	30.4	C
		4	3	Right	200	219	9.6	A
				OVERALL	1,450	1,473	56.0	E
	Intersection Total				5,300	5,284	64.6	E
Atlanta Road at West Atlanta Road (Unsignalized)	Eastbound	47	4	Right	50	43	479.3	F
				OVERALL	50	43	479.3	F
	Westbound	48	4	Right	10	10	7.8	A
				OVERALL	10	10	7.8	A
	Southbound	3	4	Thru	2,930	2,854	7.3	A
		3	4	Right	70	61	5.2	A
				OVERALL	3,000	2,915	7.3	A
	Northbound	65	4	Thru	1,440	1,495	0.0	A
		65	4	Right	10	13	1.4	A
				OVERALL	1,450	1,508	0.0	A
	Intersection Total				3,060	2,968	14.1	B

I-285/Atlanta Road
2032 AM Peak Hour Intersection Level of Service
Build Alternate - Tight Diamond

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2032 AM Volumes Design	2032 AM Volumes CORSIM	Delay (Sec/Veh)	LOS
Atlanta Road at Pine Street (Signalized)	Eastbound	66	65	Left	260	254	59.3	E
		66	65	Thru	0	17	68.1	E
		66	65	Right	280	270	45.9	D
				OVERALL	540	541	52.9	D
	Westbound	67	65	Left	10	13	67.8	E
		67	65	Thru	10	10	99.0	F
		67	65	Right	10	7	6.0	A
				OVERALL	30	30	63.8	E
	Southbound	4	65	Left	10	0	0.0	A
		4	65	Thru	2,940	2,870	18.8	B
		4	65	Right	30	29	7.7	A
				OVERALL	2,980	2,899	18.7	B
	Northbound	5	65	Left	230	258	67.3	E
		5	65	Thru	1,180	1,246	7.6	A
		5	65	Right	10	0	0.0	A
				OVERALL	1,420	1,504	17.8	B
	Intersection Total				3,550	3,470	32.2	C
Atlanta Road at I-285 Southbound Ramps (Signalized)	Eastbound	65	5	Thru	2,580	2,495	13.0	B
		65	5	Right	640	657	6.9	A
				OVERALL	3,220	3,152	11.7	B
	Westbound	6	5	Left	220	202	120.7	F
		6	5	Thru	780	858	20.8	C
				OVERALL	1,000	1,060	39.9	D
	Southbound	68	5	Left	440	467	55.2	E
		68	5	Right	640	636	3.1	A
				OVERALL	1,080	1,103	25.1	C
	Intersection Total				5,300	5,315	20.1	C
Atlanta Road at I-285 Northbound Exit Ramp (Signalized)	Eastbound	5	6	Left	1,060	1,030	27.1	C
		5	6	Thru	1,960	1,933	6.4	A
				OVERALL	3,020	2,963	13.6	B
	Westbound	7	6	Thru	670	697	59.9	E
		7	6	Right	610	580	13.2	B
				OVERALL	1,280	1,277	38.7	D
	Northbound	45	6	Left	330	367	68.1	E
		45	6	Right	240	255	39.4	D
				OVERALL	570	622	56.3	E
	Intersection Total				4,870	4,862	25.7	C
Atlanta Road at Brownwood Lane (Signalized)	Eastbound	6	7	Left	260	295	35.2	D
		6	7	Thru	1,940	1,887	16.2	B
				OVERALL	2,200	2,182	18.8	B
	Westbound	44	7	Thru	980	986	10.3	B
		44	7	Right	30	25	3.6	A
				OVERALL	1,010	1,011	10.2	B
	Southbound	46	7	Left	30	36	40.7	D
		46	7	Right	300	296	11.5	B
				OVERALL	330	332	14.7	B
	Intersection Total				3,540	3,525	15.9	B

I-285/Atlanta Road
2032 AM Peak Hour Intersection Level of Service
Build Alternate - Tight Diamond

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2032 AM Volumes Design	2032 AM Volumes CORSIM	Delay (Sec/Veh)	LOS
Paces Ferry Road at I-285 Southbound Ramps (Signalized)	Eastbound	34	8	Thru	1,700	1,654	20.6	C
		34	8	Right	290	306	4.3	A
				OVERALL	1,990	1,960	18.0	B
	Westbound	9	8	Left	300	436	77.7	E
		9	8	Thru	900	851	5.0	A
				OVERALL	1,200	1,287	29.6	C
	Southbound	7012	8	Left	830	798	49.7	D
		7012	8	Right	1,300	1,127	8.2	A
				OVERALL	2,130	1,925	25.4	C
	Intersection Total				5,320	5,172	23.7	C
Paces Ferry Road at I-285 Northbound Ramps (Signalized)	Eastbound	8	9	Left	680	668	42.8	D
		8	9	Thru	1,850	1,797	17.8	B
				OVERALL	2,530	2,465	24.6	C
	Westbound	10	9	Thru	870	917	13.6	B
		10	9	Right	980	899	7.7	A
				OVERALL	1,850	1,816	10.7	B
	Northbound	49	9	Left	330	366	30.5	C
		49	9	Right	530	592	20.6	C
				OVERALL	860	958	24.4	C
	Intersection Total				5,240	5,239	19.7	B
Paces Ferry Road at Cumberland Parkway (Signalized)	Eastbound	9	10	Left	660	488	64.2	E
		9	10	Thru	1,470	1,129	33.2	C
		9	10	Right	250	799	5.3	A
				OVERALL	2,380	2,416	30.3	C
	Westbound	36	10	Left	190	192	51.4	D
		36	10	Thru	620	615	30.6	C
		36	10	Right	100	112	10.3	B
				OVERALL	910	919	32.5	C
	Southbound	37	10	Left	120	103	49.0	D
		37	10	Thru	260	263	35.2	D
		37	10	Right	350	351	8.4	A
				OVERALL	730	717	24.1	C
	Northbound	35	10	Left	880	849	61.2	E
		35	10	Thru	1,160	1,123	54.8	D
		35	10	Right	630	661	38.1	D
				OVERALL	2,670	2,633	52.6	D
	Intersection Total				6,690	6,685	38.7	D

I-285/Atlanta Road IMR
2032 AM Peak Hour Level of Service
Build Alternate - Tight Diamond

Section	Direction	Type Section	CORSIM Nodes		2032 Volumes		Density (Veh./Lane/Mi.)	LOS
			A	B	Design	CORSIM		
I-285 Northbound South of South Cobb Drive	Northbound	Basic	54	12	7,250	7,247	29.70	D
I-285 Northbound South of South Cobb Drive Exit Ramp	Northbound	Merge/Diverge	12	14	7,250	7,243	32.09	D
I-285 Northbound Between South Cobb Drive Exit and Entrance Ramps	Northbound	Basic	14	13	6,360	6,392	26.50	D
I-285 Northbound North of South Cobb Drive Entrance Ramp	Northbound	Merge/Diverge	13	19	8,280	8,250	46.36	F
I-285 Northbound Between South Cobb Drive and Atlanta Road	Northbound	Basic	19	60	8,280	8,239	35.70	E
I-285 Northbound South of Atlanta Road Exit Ramp	Northbound	Merge/Diverge	60	21	8,280	8,237	37.91	E
I-285 Northbound Between Atlanta Road Exit and Entrance Ramps	Northbound	Basic	21	23	7,460	7,156	34.30	D
I-285 Northbound North of Atlanta Road Entrance Ramp	Northbound	Merge/Diverge	23	52	9,130	9,177	30.80	D
I-285 Northbound Between Atlanta Road and Paces Ferry Road	Northbound	Basic	52	62	9,130	9,169	32.00	D
I-285 Northbound South of Paces Ferry Road Exit Ramp	Northbound	Merge/Diverge	62	25	9,130	9,156	49.53	F
I-285 Northbound Between Paces Ferry Road Exit and Entrance Ramps	Northbound	Basic	25	39	8,060	8,031	34.50	D
I-285 Northbound North of Paces Ferry Road Entrance Ramp	Northbound	Merge/Diverge	39	42	9,720	9,583	53.85	F
I-285 Northbound Between Paces Ferry Road and Cobb Parkway Road	Northbound	Basic	42	57	9,720	9,570	41.00	E
I-285 Southbound Between Cobb Parkway and Paces Ferry Road	Southbound	Basic	56	43	8,810	8,771	47.90	F
I-285 Southbound North of Paces Ferry Road Exit Ramp	Southbound	Merge/Diverge	43	38	8,810	8,740	57.81	F
I-285 Southbound Between Paces Ferry Road Exit and Entrance Ramps	Southbound	Basic	38	26	6,680	6,852	30.10	D
I-285 Southbound South of Paces Ferry Road Entrance Ramp	Southbound	Merge/Diverge	26	63	7,270	7,563	23.02	C
I-285 Southbound Between Paces Ferry Road and Atlanta Road	Southbound	Basic	63	51	7,270	7,556	25.90	D
I-285 Southbound North of Atlanta Road Exit Ramp	Southbound	Merge/Diverge	51	24	7,270	7,567	32.83	D
I-285 Southbound Between Atlanta Road Exit and Entrance Ramps	Southbound	Basic	24	74	6,190	6,318	27.70	D
I-285 Southbound South of Atlanta Road Entrance Ramp	Southbound	Merge/Diverge	22	61	7,050	7,177	33.34	D
I-285 Southbound Between Atlanta Road and South Cobb Drive	Southbound	Basic	61	20	7,050	7,178	37.20	E
I-285 Southbound North of South Cobb Drive Exit Ramp	Southbound	Merge/Diverge	20	11	7,050	7,156	41.82	E
I-285 Southbound Between South Cobb Drive Exit and Entrance Ramps	Southbound	Basic	11	15	5,720	5,772	25.00	D
I-285 Southbound South of South Cobb Drive Entrance Ramp	Southbound	Merge/Diverge	15	16	7,470	7,535	37.52	E
I-285 Southbound South of South Cobb Drive	Southbound	Basic	16	55	7,470	7,531	34.50	D

I-285/Atlanta Road IMR
2032 PM Peak Hour Level of Service
Build Alternate - Tight Diamond

Section	Direction	Type Section	CORSIM Nodes		2032 Volumes		Density (Veh./Lane/Mi.)	LOS
			A	B	Design	CORSIM		
I-285 Northbound South of South Cobb Drive	Northbound	Basic	54	12	6,500	6,501	26.90	D
I-285 Northbound South of South Cobb Drive Exit Ramp	Northbound	Merge/Diverge	12	14	6,500	6,505	29.26	D
I-285 Northbound Between South Cobb Drive Exit and Entrance Ramps	Northbound	Basic	14	13	5,220	5,329	21.60	C
I-285 Northbound North of South Cobb Drive Entrance Ramp	Northbound	Merge/Diverge	13	19	6,520	6,608	32.92	D
I-285 Northbound Between South Cobb Drive and Atlanta Road	Northbound	Basic	19	60	6,520	6,599	27.20	D
I-285 Northbound South of Atlanta Road Exit Ramp	Northbound	Merge/Diverge	60	21	6,520	6,597	30.06	D
I-285 Northbound Between Atlanta Road Exit and Entrance Ramps	Northbound	Basic	21	73	5,710	5,750	23.20	C
I-285 Northbound North of Atlanta Road Entrance Ramp	Northbound	Merge/Diverge	23	52	6,590	6,604	23.66	C
I-285 Northbound Between Atlanta Road and Paces Ferry Road	Northbound	Basic	52	62	6,590	6,597	21.80	C
I-285 Northbound South of Paces Ferry Road Exit Ramp	Northbound	Merge/Diverge	62	25	6,590	6,603	32.28	D
I-285 Northbound Between Paces Ferry Road Exit and Entrance Ramps	Northbound	Basic	25	39	5,820	5,784	23.60	C
I-285 Northbound North of Paces Ferry Road Entrance Ramp	Northbound	Merge/Diverge	39	42	7,720	7,610	45.42	F
I-285 Northbound Between Paces Ferry Road and Cobb Parkway Road	Northbound	Basic	42	57	7,720	7,620	31.60	D
I-285 Southbound Between Cobb Parkway and Paces Ferry Road	Southbound	Basic	56	43	8,800	8,781	43.00	E
I-285 Southbound North of Paces Ferry Road Exit Ramp	Southbound	Merge/Diverge	43	38	8,800	8,785	50.47	F
I-285 Southbound Between Paces Ferry Road Exit and Entrance Ramps	Southbound	Basic	38	26	7,130	7,259	32.10	D
I-285 Southbound South of Paces Ferry Road Entrance Ramp	Southbound	Merge/Diverge	26	63	8,260	8,329	26.98	C
I-285 Southbound Between Paces Ferry Road and Atlanta Road	Southbound	Basic	63	51	8,260	8,337	34.20	D
I-285 Southbound North of Atlanta Road Exit Ramp	Southbound	Merge/Diverge	51	24	8,260	8,335	50.23	F
I-285 Southbound Between Atlanta Road Exit and Entrance Ramps	Southbound	Basic	24	74	6,450	6,587	31.10	D
I-285 Southbound South of Atlanta Road Entrance Ramp	Southbound	Merge/Diverge	22	61	7,020	7,159	29.24	D
I-285 Southbound Between Atlanta Road and South Cobb Drive	Southbound	Basic	61	20	7,020	7,146	33.60	D
I-285 Southbound North of South Cobb Drive Exit Ramp	Southbound	Merge/Diverge	20	11	7,020	7,148	36.25	E
I-285 Southbound Between South Cobb Drive Exit and Entrance Ramps	Southbound	Basic	11	15	5,650	5,741	24.50	D
I-285 Southbound South of South Cobb Drive Entrance Ramp	Southbound	Merge/Diverge	15	16	6,680	6,822	28.79	D
I-285 Southbound South of South Cobb Drive	Southbound	Basic	16	55	6,680	6,821	30.00	D

I-285/Atlanta Road
2032 PM Peak Hour Intersection Level of Service
Build Alternate - Tight Diamond

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2032 PM Volumes Design	2032 PM Volumes CORSIM	Delay (Sec/Veh)	LOS
South Cobb Drive at I-285 Southbound Ramps (Signalized)	Eastbound	32	1	Thru	1,560	1,526	23.3	C
		32	1	Right	960	994	3.8	A
				OVERALL	2,520	2,520	15.6	B
	Westbound	2	1	Left	70	88	46.6	D
		2	1	Thru	1,830	1,717	15.0	B
				OVERALL	1,900	1,805	16.5	B
	Southbound	7003	1	Left	530	568	32.0	C
		7003	1	Right	840	819	14.0	B
				OVERALL	1,370	1,387	21.3	C
	Intersection Total				5,790	5,712	17.3	B
South Cobb Drive at I-285 Northbound Ramps (Signalized)	Eastbound	1	2	Left	980	964	44.1	D
		1	2	Thru	1,110	1,132	35.0	C
				OVERALL	2,090	2,096	39.2	D
	Westbound	33	2	Thru	680	685	38.2	D
		33	2	Right	320	319	8.5	A
				OVERALL	1,000	1,004	28.7	C
	Northbound	7001	2	Left	1,220	1,123	27.9	C
		7001	2	Right	60	62	9.3	A
				OVERALL	1,280	1,185	26.9	C
	Intersection Total				4,370	4,285	33.3	C
Atlanta Road at Cumberland Parkway (Signalized)	Eastbound	41	3	Left	250	250	72.6	E
		41	3	Thru	430	442	53.4	D
		41	3	Right	410	395	2.5	A
				OVERALL	1,090	1,087	39.3	D
	Westbound	31	3	Left	180	157	69.6	E
		31	3	Thru	1,000	1,030	56.6	E
		31	3	Right	80	70	18.9	B
				OVERALL	1,260	1,257	56.1	E
	Southbound	40	3	Left	120	118	34.3	C
		40	3	Thru	730	730	40.6	D
		40	3	Right	540	534	27.7	C
				OVERALL	1,390	1,382	35.1	C
	Northbound	4	3	Left	1,270	1,256	42.4	D
		4	3	Thru	1,670	1,654	26.4	C
		4	3	Right	120	133	6.0	A
				OVERALL	3,060	3,043	32.1	C
	Intersection Total				6,800	6,769	38.3	D
Atlanta Road at West Atlanta Road (Unsignalized)	Eastbound	47	4	Right	110	109	7.5	A
				OVERALL	110	109	7.5	A
	Westbound	48	4	Right	10	19	19.3	C
				OVERALL	10	19	19.3	C
	Southbound	3	4	Thru	1,080	1,064	0.1	A
		3	4	Right	240	218	1.9	A
				OVERALL	1,320	1,282	0.4	A
	Northbound	65	4	Thru	3,040	3,025	0.0	A
		65	4	Right	10	0	0.0	A
				OVERALL	3,050	3,025	0.0	A
	Intersection Total				1,440	1,410	1.3	A

I-285/Atlanta Road
2032 PM Peak Hour Intersection Level of Service
Build Alternate - Tight Diamond

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2032 PM Volumes Design	2032 PM Volumes CORSIM	Delay (Sec/Veh)	LOS
Atlanta Road at Pine Street (Signalized)	Eastbound	66	65	Left	580	579	62.0	E
		66	65	Thru	10	8	57.0	E
		66	65	Right	160	163	10.9	B
				OVERALL	750	750	50.9	D
	Westbound	67	65	Left	10	13	75.2	E
		67	65	Thru	10	10	66.6	E
		67	65	Right	10	7	28.3	C
				OVERALL	30	30	61.4	E
	Southbound	4	65	Left	10	8	81.8	F
		4	65	Thru	1,060	1,067	46.7	D
		4	65	Right	120	109	8.0	A
				OVERALL	1,190	1,184	43.4	D
	Northbound	5	65	Left	800	772	48.9	D
		5	65	Thru	2,460	2,439	18.2	B
		5	65	Right	10	0	0.0	A
				OVERALL	3,270	3,211	25.5	C
	Intersection Total				5,240	5,175	33.5	C
Atlanta Road at I-285 Southbound Ramps (Signalized)	Eastbound	65	5	Thru	920	947	7.0	A
		65	5	Right	310	298	5.1	A
				OVERALL	1,230	1,245	6.5	A
	Westbound	6	5	Left	260	273	19.3	B
		6	5	Thru	1,970	2,005	18.6	B
				OVERALL	2,230	2,278	18.7	B
	Southbound	68	5	Left	530	547	41.8	D
		68	5	Right	1,280	1,206	9.8	A
				OVERALL	1,810	1,753	19.8	B
	Intersection Total				5,270	5,276	16.2	B
Atlanta Road at I-285 Northbound Exit Ramp (Signalized)	Eastbound	5	6	Left	360	364	98.5	F
		5	6	Thru	1,090	1,123	12.8	B
				OVERALL	1,450	1,487	33.7	C
	Westbound	7	6	Thru	1,710	1,734	26.5	C
		7	6	Right	520	501	8.4	A
				OVERALL	2,230	2,235	22.4	C
	Northbound	45	6	Left	520	554	50.1	D
		45	6	Right	290	298	12.5	B
				OVERALL	810	852	37.0	D
	Intersection Total				4,490	4,574	28.8	C
Atlanta Road at Brownwood Lane (Signalized)	Eastbound	6	7	Left	210	200	59.0	E
		6	7	Thru	880	1,221	4.2	A
				OVERALL	1,090	1,421	11.9	B
	Westbound	44	7	Thru	1,930	1,943	18.6	B
		44	7	Right	40	30	6.8	A
				OVERALL	1,970	1,973	18.4	B
	Southbound	46	7	Left	50	53	61.6	E
		46	7	Right	300	294	38.9	D
				OVERALL	350	347	42.3	D
	Intersection Total				3,410	3,741	18.1	B

I-285/Atlanta Road
2032 PM Peak Hour Intersection Level of Service
Build Alternate - Tight Diamond

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2032 PM Volumes Design	2032 PM Volumes CORSIM	Delay (Sec/Veh)	LOS
Paces Ferry Road at I-285 Southbound Ramps (Signalized)	Eastbound	34	8	Thru	1,450	1,404	19.6	B
		34	8	Right	470	492	5.2	A
				OVERALL	1,920	1,896	15.9	B
	Westbound	9	8	Left	660	602	81.1	F
		9	8	Thru	1,030	1,059	8.2	A
				OVERALL	1,690	1,661	34.6	C
	Southbound	7012	8	Left	650	605	46.6	D
		7012	8	Right	1,020	935	11.6	B
				OVERALL	1,670	1,540	25.3	C
	Intersection Total				5,280	5,097	24.8	C
Paces Ferry Road at I-285 Northbound Ramps (Signalized)	Eastbound	8	9	Left	590	567	42.2	D
		8	9	Thru	1,510	1,453	7.4	A
				OVERALL	2,100	2,020	17.2	B
	Westbound	10	9	Thru	1,360	1,270	16.1	B
		10	9	Right	1,310	1,278	6.8	A
				OVERALL	2,670	2,548	11.5	B
	Northbound	49	9	Left	330	373	39.9	D
		49	9	Right	330	391	16.7	B
				OVERALL	660	764	28.0	C
	Intersection Total				5,430	5,332	16.0	B
Paces Ferry Road at Cumberland Parkway (Signalized)	Eastbound	9	10	Left	340	333	45.0	D
		9	10	Thru	750	878	40.2	D
		9	10	Right	750	656	13.9	B
				OVERALL	1,840	1,867	31.8	C
	Westbound	36	10	Left	440	448	61.2	E
		36	10	Thru	1,430	1,440	47.2	D
		36	10	Right	160	159	5.4	A
				OVERALL	2,030	2,047	47.0	D
	Southbound	37	10	Left	180	171	24.0	C
		37	10	Thru	1,760	1,741	32.0	C
		37	10	Right	680	691	18.2	B
				OVERALL	2,620	2,603	27.8	C
	Northbound	35	10	Left	560	446	303.4	F
		35	10	Thru	650	653	29.9	C
		35	10	Right	350	376	10.8	B
				OVERALL	1,560	1,475	107.7	F
	Intersection Total				8,050	7,992	48.4	D

I-285/Atlanta Road
2032 AM Peak Hour Intersection Level of Service
No Build Alternate

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2032 AM Volumes Design	2032 AM Volumes CORSIM	Delay (Sec/Veh)	LOS
South Cobb Drive at I-285 Southbound Ramps (Signalized)	Eastbound	32	1	Thru	1,720	1,668	17.1	B
		32	1	Right	1,610	1,666	3.9	A
				OVERALL	3,330	3,334	10.5	B
	Westbound	2	1	Left	140	111	50.1	D
		2	1	Thru	1,280	1,294	10.8	B
				OVERALL	1,420	1,405	13.9	B
	Southbound	7003	1	Left	320	314	39.5	D
		7003	1	Right	1,010	1,049	12.9	B
				OVERALL	1,330	1,363	19.0	B
	Intersection Total				6,080	6,102	13.2	B
South Cobb Drive at I-285 Northbound Ramps (Signalized)	Eastbound	1	2	Left	1,170	1,109	54.4	D
		1	2	Thru	870	853	25.5	C
				OVERALL	2,040	1,962	41.8	D
	Westbound	33	2	Thru	560	567	39.9	D
		33	2	Right	750	743	20.5	C
				OVERALL	1,310	1,310	28.9	C
	Northbound	7001	2	Left	860	838	24.5	C
		7001	2	Right	30	23	4.4	A
				OVERALL	890	861	23.9	C
	Intersection Total				4,240	4,133	34.0	C
Atlanta Road at Cumberland Parkway (Signalized)	Eastbound	41	3	Left	300	229	162.3	F
		41	3	Thru	1,280	992	128.0	F
		41	3	Right	1,360	976	103.6	F
				OVERALL	2,940	2,197	120.7	F
	Westbound	31	3	Left	160	145	77.8	E
		31	3	Thru	300	317	36.5	D
		31	3	Right	60	59	6.5	A
				OVERALL	520	521	44.6	D
	Southbound	40	3	Left	200	156	109.6	F
		40	3	Thru	1,480	1,176	152.8	F
		40	3	Right	160	151	118.3	F
				OVERALL	1,840	1,483	144.8	F
	Northbound	4	3	Left	570	547	90.8	F
		4	3	Thru	680	700	38.0	D
		4	3	Right	200	224	9.1	A
				OVERALL	1,450	1,471	53.3	D
	Intersection Total				5,300	4,201	138.4	F
Atlanta Road at West Atlanta Road (Unsignalized)	Eastbound	47	4	Right	50	5	11605.2	F
				OVERALL	50	5	11605.2	F
	Westbound	48	4	Right	10	10	7.2	A
				OVERALL	10	10	7.2	A
	Southbound	3	4	Thru	2,930	2,158	89.4	F
		3	4	Right	70	49	60.9	F
				OVERALL	3,000	2,207	88.8	F
	Northbound	65	4	Thru	1,440	1,461	0.1	A
		65	4	Right	10	13	2.3	A
				OVERALL	1,450	1,474	0.1	A
	Intersection Total				3,060	2,222	114.4	F

I-285/Atlanta Road
2032 AM Peak Hour Intersection Level of Service
No Build Alternate

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2032 AM Volumes Design	2032 AM Volumes CORSIM	Delay (Sec/Veh)	LOS
Atlanta Road at Pine Street (Signalized)	Eastbound	66	65	Left	260	257	65.3	E
		66	65	Thru	0	17	96.0	F
		66	65	Right	280	257	80.8	F
				OVERALL	540	531	73.8	E
	Westbound	67	65	Left	10	13	106.2	F
		67	65	Thru	10	10	59.4	E
		67	65	Right	10	7	44.6	D
				OVERALL	30	30	76.2	E
	Southbound	4	65	Left	10	0	0.0	A
		4	65	Thru	2,940	2,121	49.9	D
		4	65	Right	30	17	18.4	B
				OVERALL	2,980	2,138	49.6	D
	Northbound	5	65	Left	230	259	80.8	F
		5	65	Thru	1,180	1,215	6.7	A
		5	65	Right	10	0	0.0	A
				OVERALL	1,420	1,474	19.8	B
	Intersection Total				3,550	2,699	65.5	E
Atlanta Road at I-285 Southbound Ramps (Signalized)	Eastbound	65	5	Thru	2,580	1,843	76.1	E
		65	5	Right	640	520	37.0	D
				OVERALL	3,220	2,363	67.5	E
	Westbound	6	5	Left	220	198	150.6	F
		6	5	Thru	780	812	36.8	D
				OVERALL	1,000	1,010	59.1	E
	Southbound	68	5	Left	440	496	67.9	E
		68	5	Right	640	667	7.0	A
				OVERALL	1,080	1,163	33.0	C
	Intersection Total				5,300	4,536	56.8	E
Atlanta Road at I-285 Northbound Ramps (Signalized)	Eastbound	5	6	Left	1,060	735	33.9	C
		5	6	Thru	1,960	1,605	24.4	C
				OVERALL	3,020	2,340	27.3	C
	Westbound	7	6	Thru	670	697	75.6	E
		7	6	Right	610	594	19.6	B
				OVERALL	1,280	1,291	49.8	D
	Northbound	70	6	Left	330	351	68.3	E
		70	6	Right	240	254	24.5	C
				OVERALL	570	605	49.9	D
	Intersection Total				4,870	4,236	37.4	D
Atlanta Road at Brownwood Lane (Signalized)	Eastbound	6	7	Left	250	211	33.6	C
		6	7	Thru	1,930	1,636	15.7	B
		6	7	Right	20	17	3.9	A
				OVERALL	2,200	1,864	17.6	B
	Westbound	44	7	Left	10	3	4.0	A
		44	7	Thru	960	981	10.5	B
		44	7	Right	30	26	2.8	A
				OVERALL	1,000	1,010	10.3	B
	Southbound	46	7	Left	50	38	37.1	D
		46	7	Thru	10	10	33.6	C
		46	7	Right	310	301	15.6	B
				OVERALL	370	349	18.4	B
	Northbound	45	7	Left	10	13	53.5	D
		45	7	Thru	0	0	0.0	A
		45	7	Right	10	7	15.4	B
				OVERALL	20	20	40.2	D
	Intersection Total				3,570	3,223	15.7	B

I-285/Atlanta Road
2032 AM Peak Hour Intersection Level of Service
No Build Alternate

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2032 AM Volumes Design	2032 AM Volumes CORSIM	Delay (Sec/Veh)	LOS
Paces Ferry Road at I-285 Southbound Ramps (Signalized)	Eastbound	34	8	Thru	1,700	1,655	20.7	C
		34	8	Right	290	307	4.8	A
				OVERALL	1,990	1,962	18.2	B
	Westbound	9	8	Left	300	437	78.4	E
		9	8	Thru	900	843	5.3	A
				OVERALL	1,200	1,280	30.3	C
	Southbound	7012	8	Left	830	727	47.8	D
		7012	8	Right	1,300	1,156	8.6	A
				OVERALL	2,130	1,883	23.7	C
	Intersection Total				5,320	5,125	23.2	C
Paces Ferry Road at I-285 Northbound Ramps (Signalized)	Eastbound	8	9	Left	680	633	45.2	D
		8	9	Thru	1,850	1,767	18.7	B
				OVERALL	2,530	2,400	25.7	C
	Westbound	10	9	Thru	870	924	13.4	B
		10	9	Right	980	894	7.4	A
				OVERALL	1,850	1,818	10.4	B
	Northbound	49	9	Left	330	345	32.5	C
		49	9	Right	530	568	22.1	C
				OVERALL	860	913	26.0	C
	Intersection Total				5,240	5,131	20.3	C
Paces Ferry Road at Cumberland Parkway (Signalized)	Eastbound	9	10	Left	660	467	60.3	E
		9	10	Thru	1,470	1,104	33.7	C
		9	10	Right	250	782	5.2	A
				OVERALL	2,380	2,353	29.5	C
	Westbound	36	10	Left	190	192	55.5	E
		36	10	Thru	620	620	30.5	C
		36	10	Right	100	112	9.0	A
				OVERALL	910	924	33.1	C
	Southbound	37	10	Left	120	106	47.8	D
		37	10	Thru	260	264	34.3	C
		37	10	Right	350	353	8.8	A
				OVERALL	730	723	23.8	C
	Northbound	35	10	Left	880	846	62.7	E
		35	10	Thru	1,160	1,125	52.9	D
		35	10	Right	630	654	38.5	D
				OVERALL	2,670	2,625	52.5	D
	Intersection Total				6,690	6,625	38.5	D

I-285/Atlanta Road IMR
2032 AM Peak Hour Level of Service
No Build

Section	Direction	Type Section	CORSIM Nodes		2032 Volumes		Density (Veh./Lane/Mi.)	LOS
			A	B	Design	CORSIM		
I-285 Northbound South of South Cobb Drive	Northbound	Basic	54	12	7,250	7,251	30.10	D
I-285 Northbound South of South Cobb Drive Exit Ramp	Northbound	Merge/Diverge	12	14	7,250	7,253	32.34	D
I-285 Northbound Between South Cobb Drive Exit and Entrance Ramps	Northbound	Basic	14	13	6,360	6,424	27.10	D
I-285 Northbound North of South Cobb Drive Entrance Ramp	Northbound	Merge/Diverge	13	19	8,280	8,290	44.68	F
I-285 Northbound Between South Cobb Drive and Atlanta Road	Northbound	Basic	19	60	8,280	8,280	36.30	E
I-285 Northbound South of Atlanta Road Exit Ramp	Northbound	Merge/Diverge	60	21	8,280	8,276	37.90	E
I-285 Northbound Between Atlanta Road Exit and Entrance Ramps	Northbound	Basic	21	23	7,460	7,105	33.60	D
I-285 Northbound North of Atlanta Road Entrance Ramp	Northbound	Merge/Diverge	23	52	9,130	8,746	51.29	F
I-285 Northbound Between Atlanta Road and Paces Ferry Road	Northbound	Basic	52	62	9,130	8,729	45.10	F
I-285 Northbound South of Paces Ferry Road Exit Ramp	Northbound	Merge/Diverge	62	25	9,130	8,727	44.78	F
I-285 Northbound Between Paces Ferry Road Exit and Entrance Ramps	Northbound	Basic	25	39	8,060	7,592	32.30	D
I-285 Northbound North of Paces Ferry Road Entrance Ramp	Northbound	Merge/Diverge	39	42	9,720	9,114	51.47	F
I-285 Northbound Between Paces Ferry Road and Cobb Parkway Road	Northbound	Basic	42	57	9,720	9,122	39.60	E
I-285 Southbound Between Cobb Parkway and Paces Ferry Road	Southbound	Basic	56	43	8,810	8,760	46.40	F
I-285 Southbound North of Paces Ferry Road Exit Ramp	Southbound	Merge/Diverge	43	38	8,810	8,747	56.59	F
I-285 Southbound Between Paces Ferry Road Exit and Entrance Ramps	Southbound	Basic	38	26	6,680	6,803	29.60	D
I-285 Southbound South of Paces Ferry Road Entrance Ramp	Southbound	Merge/Diverge	26	63	7,270	7,505	35.06	E
I-285 Southbound Between Paces Ferry Road and Atlanta Road	Southbound	Basic	63	51	7,270	7,500	37.10	E
I-285 Southbound North of Atlanta Road Exit Ramp	Southbound	Merge/Diverge	51	24	7,270	7,498	35.18	E
I-285 Southbound Between Atlanta Road Exit and Entrance Ramps	Southbound	Basic	24	22	6,190	8,746	38.90	E
I-285 Southbound South of Atlanta Road Entrance Ramp	Southbound	Merge/Diverge	22	61	7,050	7,081	28.96	D
I-285 Southbound Between Atlanta Road and South Cobb Drive	Southbound	Basic	61	20	7,050	7,105	32.70	D
I-285 Southbound North of South Cobb Drive Exit Ramp	Southbound	Merge/Diverge	20	11	7,050	7,105	40.89	E
I-285 Southbound Between South Cobb Drive Exit and Entrance Ramps	Southbound	Basic	11	15	5,720	5,700	24.40	D
I-285 Southbound South of South Cobb Drive Entrance Ramp	Southbound	Merge/Diverge	15	16	7,470	7,468	36.98	E
I-285 Southbound South of South Cobb Drive	Southbound	Basic	16	55	7,470	7,467	34.50	D

I-285/Atlanta Road IMR
2032 PM Peak Hour Level of Service
No Build

Section	Direction	Type Section	CORSIM Nodes		2032 Volumes		Density (Veh./Lane/Mi.)	LOS
			A	B	Design	CORSIM		
I-285 Northbound South of South Cobb Drive	Northbound	Basic	54	12	6,500	6,499	26.90	D
I-285 Northbound South of South Cobb Drive Exit Ramp	Northbound	Merge/Diverge	12	14	6,500	6,506	29.28	D
I-285 Northbound Between South Cobb Drive Exit and Entrance Ramps	Northbound	Basic	14	13	5,220	5,213	21.10	C
I-285 Northbound North of South Cobb Drive Entrance Ramp	Northbound	Merge/Diverge	13	19	6,520	6,484	31.76	D
I-285 Northbound Between South Cobb Drive and Atlanta Road	Northbound	Basic	19	60	6,520	6,490	26.80	D
I-285 Northbound South of Atlanta Road Exit Ramp	Northbound	Merge/Diverge	60	21	6,520	6,497	29.46	D
I-285 Northbound Between Atlanta Road Exit and Entrance Ramps	Northbound	Basic	21	23	5,710	7,060	29.90	D
I-285 Northbound North of Atlanta Road Entrance Ramp	Northbound	Merge/Diverge	23	52	6,590	6,380	30.69	D
I-285 Northbound Between Atlanta Road and Paces Ferry Road	Northbound	Basic	52	62	6,590	6,368	26.30	D
I-285 Northbound South of Paces Ferry Road Exit Ramp	Northbound	Merge/Diverge	62	25	6,590	6,377	29.82	D
I-285 Northbound Between Paces Ferry Road Exit and Entrance Ramps	Northbound	Basic	25	39	5,820	5,609	22.80	C
I-285 Northbound North of Paces Ferry Road Entrance Ramp	Northbound	Merge/Diverge	39	42	7,720	7,443	44.28	F
I-285 Northbound Between Paces Ferry Road and Cobb Parkway Road	Northbound	Basic	42	57	7,720	7,442	30.70	D
I-285 Southbound Between Cobb Parkway and Paces Ferry Road	Southbound	Basic	56	43	8,800	8,768	45.60	F
I-285 Southbound North of Paces Ferry Road Exit Ramp	Southbound	Merge/Diverge	43	38	8,800	8,667	58.82	F
I-285 Southbound Between Paces Ferry Road Exit and Entrance Ramps	Southbound	Basic	38	26	7,130	7,140	64.60	F
I-285 Southbound South of Paces Ferry Road Entrance Ramp	Southbound	Merge/Diverge	26	63	8,260	8,112	62.89	F
I-285 Southbound Between Paces Ferry Road and Atlanta Road	Southbound	Basic	63	51	8,260	8,086	45.80	F
I-285 Southbound North of Atlanta Road Exit Ramp	Southbound	Merge/Diverge	51	24	8,260	8,093	43.51	F
I-285 Southbound Between Atlanta Road Exit and Entrance Ramps	Southbound	Basic	24	22	6,450	6,380	23.20	C
I-285 Southbound South of Atlanta Road Entrance Ramp	Southbound	Merge/Diverge	22	61	7,020	7,071	25.88	C
I-285 Southbound Between Atlanta Road and South Cobb Drive	Southbound	Basic	61	20	7,020	7,064	31.40	D
I-285 Southbound North of South Cobb Drive Exit Ramp	Southbound	Merge/Diverge	20	11	7,020	7,060	32.72	D
I-285 Southbound Between South Cobb Drive Exit and Entrance Ramps	Southbound	Basic	11	15	5,650	5,679	23.90	C
I-285 Southbound South of South Cobb Drive Entrance Ramp	Southbound	Merge/Diverge	15	16	6,680	6,760	28.38	D
I-285 Southbound South of South Cobb Drive	Southbound	Basic	16	55	6,680	6,745	29.00	D

I-285/Atlanta Road
2032 PM Peak Hour Intersection Level of Service
No Build Alternate

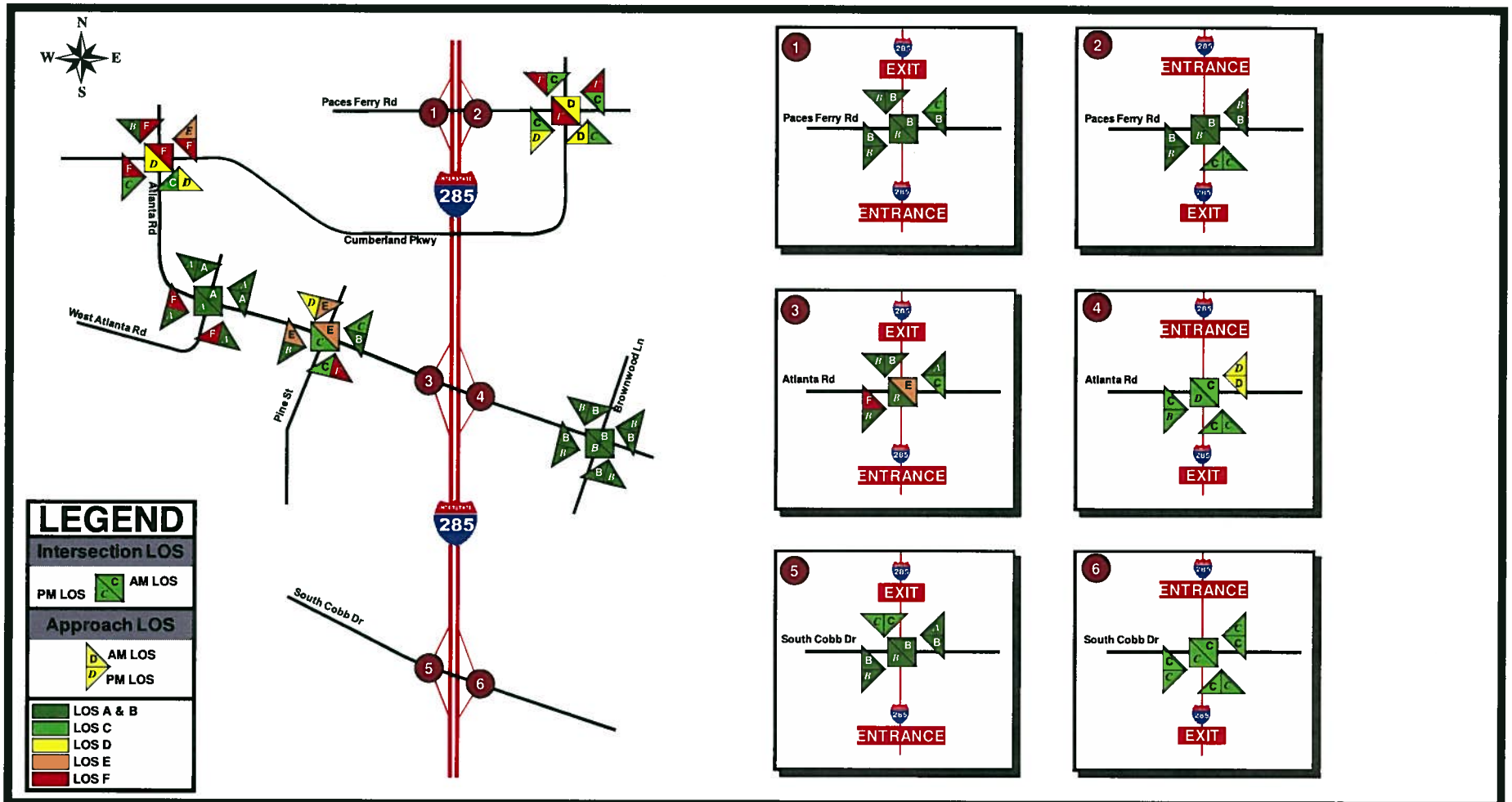
Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2032 PM Volumes Design	2032 PM Volumes CORSIM	Delay (Sec/Veh)	LOS
South Cobb Drive at I-285 Southbound Ramps (Signalized)	Eastbound	32	1	Thru	1,560	1,530	23.9	C
		32	1	Right	960	994	3.7	A
				OVERALL	2,520	2,524	16.0	B
	Westbound	2	1	Left	70	85	49.8	D
		2	1	Thru	1,830	1,815	15.3	B
				OVERALL	1,900	1,900	16.9	B
	Southbound	7003	1	Left	530	513	31.2	C
		7003	1	Right	840	837	13.3	B
				OVERALL	1,370	1,350	20.1	C
	Intersection Total				5,790	5,774	17.2	B
South Cobb Drive at I-285 Northbound Ramps (Signalized)	Eastbound	1	2	Left	980	968	44.8	D
		1	2	Thru	1,110	1,075	34.7	C
				OVERALL	2,090	2,043	39.5	D
	Westbound	33	2	Thru	680	684	41.7	D
		33	2	Right	320	321	7.3	A
				OVERALL	1,000	1,005	30.7	C
	Northbound	7001	2	Left	1,220	1,219	29.0	C
		7001	2	Right	60	59	9.8	A
				OVERALL	1,280	1,278	28.1	C
	Intersection Total				4,370	4,326	34.1	C
Atlanta Road at Cumberland Parkway (Signalized)	Eastbound	41	3	Left	250	250	73.7	E
		41	3	Thru	430	444	50.9	D
		41	3	Right	410	394	2.5	A
				OVERALL	1,090	1,088	38.6	D
	Westbound	31	3	Left	180	158	75.7	E
		31	3	Thru	1,000	1,029	62.1	E
		31	3	Right	80	70	20.7	C
				OVERALL	1,260	1,257	61.5	E
	Southbound	40	3	Left	120	118	24.9	C
		40	3	Thru	730	733	40.9	D
		40	3	Right	540	534	27.6	C
				OVERALL	1,390	1,385	34.4	C
	Northbound	4	3	Left	1,270	1,244	41.2	D
		4	3	Thru	1,670	1,603	27.7	C
		4	3	Right	120	123	5.3	A
				OVERALL	3,060	2,970	32.5	C
	Intersection Total				6,800	6,700	39.3	D
Atlanta Road at West Atlanta Road (Unsignalized)	Eastbound	47	4	Right	110	111	8.6	A
				OVERALL	110	111	8.6	A
	Westbound	48	4	Right	10	20	19.8	C
				OVERALL	10	20	19.8	C
	Southbound	3	4	Thru	1,080	1,073	0.3	A
		3	4	Right	240	215	2.4	A
				OVERALL	1,320	1,288	0.7	A
	Northbound	65	4	Thru	3,040	2,966	0.0	A
		65	4	Right	10	0	0.0	A
				OVERALL	3,050	2,966	0.0	A
	Intersection Total				1,440	1,419	1.6	A

I-285/Atlanta Road
2032 PM Peak Hour Intersection Level of Service
No Build Alternate

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2032 PM Volumes Design	2032 PM Volumes CORSIM	Delay (Sec/Veh)	LOS
Atlanta Road at Pine Street (Signalized)	Eastbound	66	65	Left	580	582	81.2	F
		66	65	Thru	10	8	61.5	E
		66	65	Right	160	163	11.4	B
				OVERALL	750	753	65.9	E
	Westbound	67	65	Left	10	13	80.3	F
		67	65	Thru	10	10	58.8	E
		67	65	Right	10	7	18.0	B
				OVERALL	30	30	58.6	E
	Southbound	4	65	Left	10	10	84.6	F
		4	65	Thru	1,060	1,066	38.3	D
		4	65	Right	120	111	8.4	A
				OVERALL	1,190	1,187	35.9	D
	Northbound	5	65	Left	800	718	75.1	E
		5	65	Thru	2,460	2,373	18.3	B
		5	65	Right	10	0	0.0	A
				OVERALL	3,270	3,091	31.5	C
	Intersection Total				5,240	5,061	37.8	D
Atlanta Road at I-285 Southbound Ramps (Signalized)	Eastbound	65	5	Thru	920	945	6.0	A
		65	5	Right	310	296	3.1	A
				OVERALL	1,230	1,241	5.3	A
	Westbound	6	5	Left	220	277	39.3	D
		6	5	Thru	1,970	1,920	25.0	C
				OVERALL	2,190	2,197	26.8	C
	Southbound	68	5	Left	530	544	53.6	D
		68	5	Right	1,280	1,171	7.2	A
				OVERALL	1,810	1,715	21.9	C
	Intersection Total				5,230	5,153	20.0	B
Atlanta Road at I-285 Northbound Ramps (Signalized)	Eastbound	5	6	Left	360	239	33.9	C
		5	6	Thru	1,090	1,253	24.4	C
				OVERALL	1,450	1,492	25.9	C
	Westbound	7	6	Thru	1,730	1,705	75.6	E
		7	6	Right	520	508	19.6	B
				OVERALL	2,250	2,213	62.7	E
	Northbound	70	6	Left	520	518	68.3	E
		70	6	Right	290	324	24.5	C
				OVERALL	810	842	51.5	D
	Intersection Total				4,510	4,547	48.5	D
Atlanta Road at Brownwood Lane (Signalized)	Eastbound	6	7	Left	210	237	33.6	C
		6	7	Thru	1,160	1,312	15.7	B
		6	7	Right	10	12	3.9	A
				OVERALL	1,380	1,561	18.3	B
	Westbound	44	7	Left	10	11	4.0	A
		44	7	Thru	1,920	1,925	10.5	B
		44	7	Right	40	30	2.8	A
				OVERALL	1,970	1,966	10.3	B
	Southbound	46	7	Left	40	56	37.1	D
		46	7	Thru	10	15	33.6	C
		46	7	Right	300	289	15.6	B
				OVERALL	350	360	19.7	B
	Northbound	45	7	Left	10	14	53.5	D
		45	7	Thru	10	6	0.0	A
		45	7	Right	10	10	15.4	B
				OVERALL	30	30	30.1	C
	Intersection Total				3,700	3,887	14.6	B

I-285/Atlanta Road
2032 PM Peak Hour Intersection Level of Service
No Build Alternate

Intersection	Approach	CORSIM Nodes A	CORSIM Nodes B	Movement	2032 PM Volumes Design	2032 PM Volumes CORSIM	Delay (Sec/Veh)	LOS
Paces Ferry Road at I-285 Southbound Ramps (Signalized)	Eastbound	34	8	Thru	1,450	1,404	19.7	B
		34	8	Right	470	489	6.5	A
				OVERALL	1,920	1,893	16.3	B
	Westbound	9	8	Left	660	598	81.9	F
		9	8	Thru	1,030	1,039	7.9	A
				OVERALL	1,690	1,637	34.9	C
	Southbound	7012	8	Left	650	558	48.9	D
		7012	8	Right	1,020	946	12.2	B
				OVERALL	1,670	1,504	25.8	C
	Intersection Total				5,280	5,034	25.2	C
Paces Ferry Road at I-285 Northbound Ramps (Signalized)	Eastbound	8	9	Left	590	551	43.4	D
		8	9	Thru	1,510	1,420	7.4	A
				OVERALL	2,100	1,971	17.4	B
	Westbound	10	9	Thru	1,360	1,260	15.9	B
		10	9	Right	1,310	1,268	6.9	A
				OVERALL	2,670	2,528	11.4	B
	Northbound	49	9	Left	330	357	40.2	D
		49	9	Right	330	371	16.8	B
				OVERALL	660	728	28.3	C
	Intersection Total				5,430	5,227	16.0	B
Paces Ferry Road at Cumberland Parkway (Signalized)	Eastbound	9	10	Left	340	332	47.7	D
		9	10	Thru	750	849	37.3	D
		9	10	Right	750	637	14.6	B
				OVERALL	1,840	1,818	31.3	C
	Westbound	36	10	Left	440	446	66.0	E
		36	10	Thru	1,430	1,438	47.7	D
		36	10	Right	160	158	5.1	A
				OVERALL	2,030	2,042	48.4	D
	Southbound	37	10	Left	180	170	28.8	C
		37	10	Thru	1,760	1,737	32.4	C
		37	10	Right	680	693	17.8	B
				OVERALL	2,620	2,600	28.3	C
	Northbound	35	10	Left	560	434	352.1	F
		35	10	Thru	650	651	29.0	C
		35	10	Right	350	373	10.1	B
				OVERALL	1,560	1,458	120.4	F
	Intersection Total				8,050	7,918	51.1	D



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Atlanta Road @ I-285

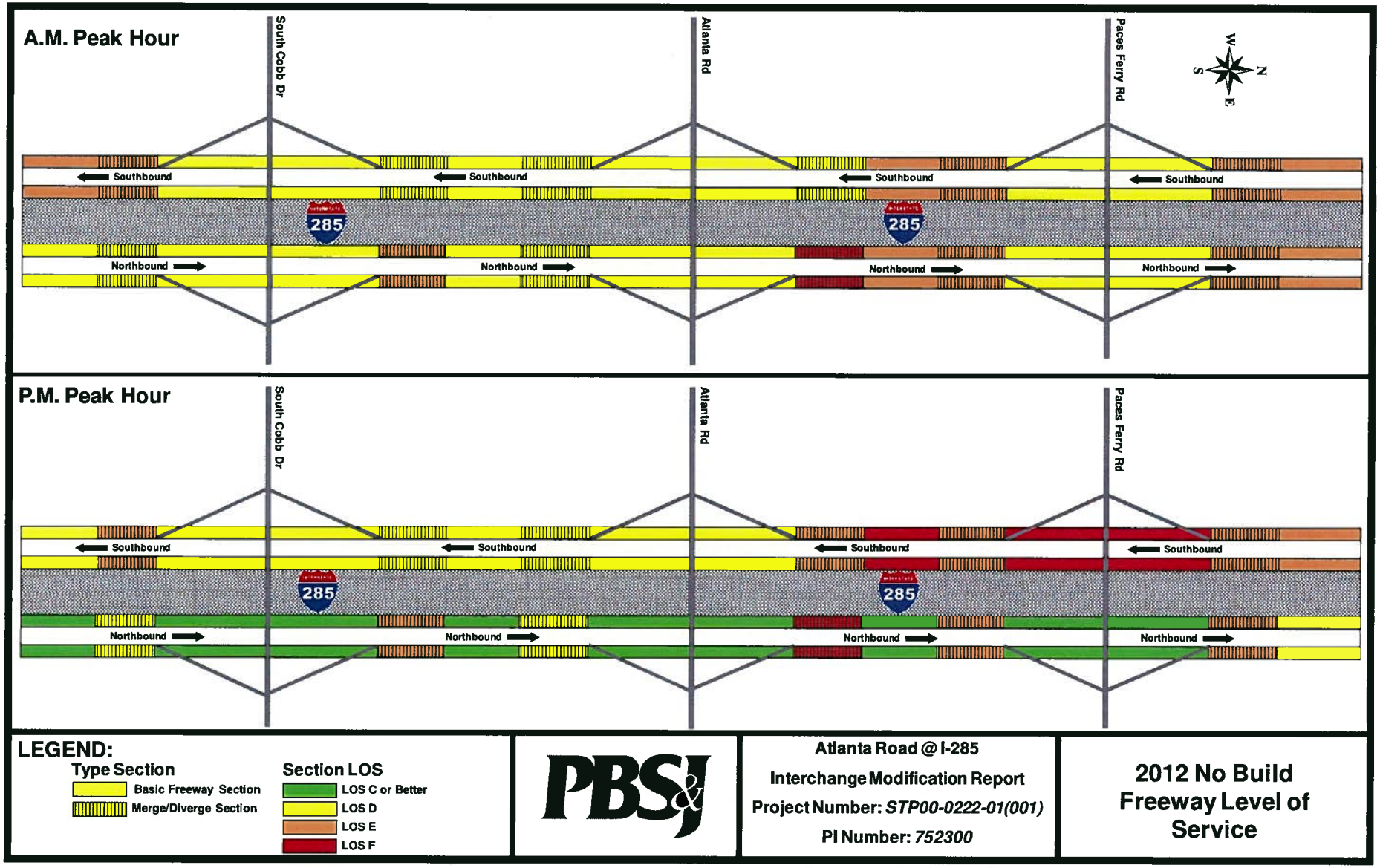
Interchange Modification Report

Project Number: *STP00-0222-01(001)*

PI Number: *752300*

2012 No Build Intersection Level of Service

Figure 6.3


A.M. Peak Hour
South Cobb Dr
Atlanta Rd
Paces Ferry Rd
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P.M. Peak Hour
South Cobb Dr
Atlanta Rd
Paces Ferry Rd
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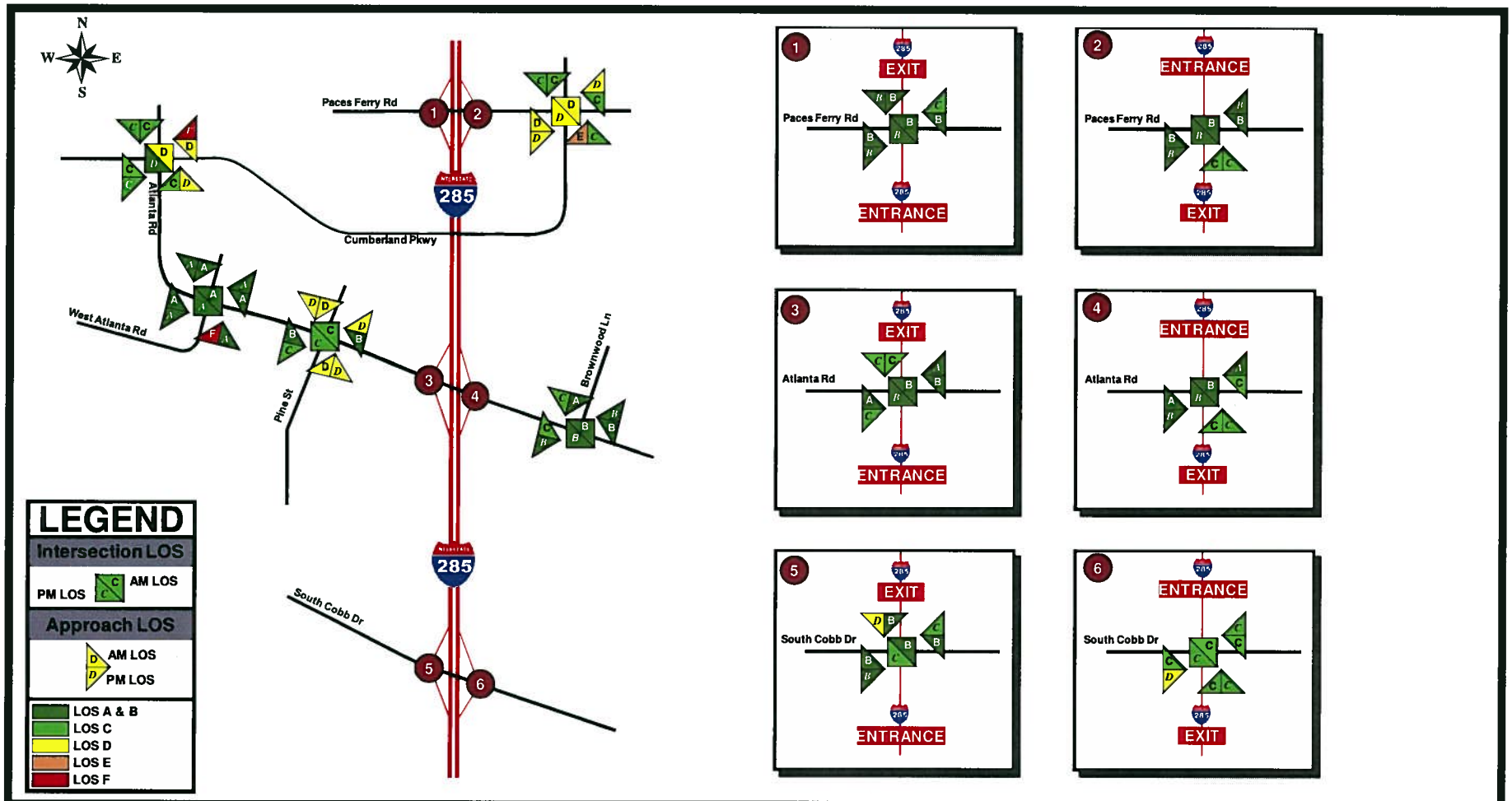
Northbound
LEGEND:
Type Section
Basic Freeway Section
Merge/Diverge Section
Section LOS
LOS C or Better
LOS D
LOS E
LOS F
PBSJ
Atlanta Road @ I-285
Interchange Modification Report
Project Number: STP00-0222-01(001)
PI Number: 752300
2012 No Build
Freeway Level of
Service

Figure 6.4



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Atlanta Road @ I-285

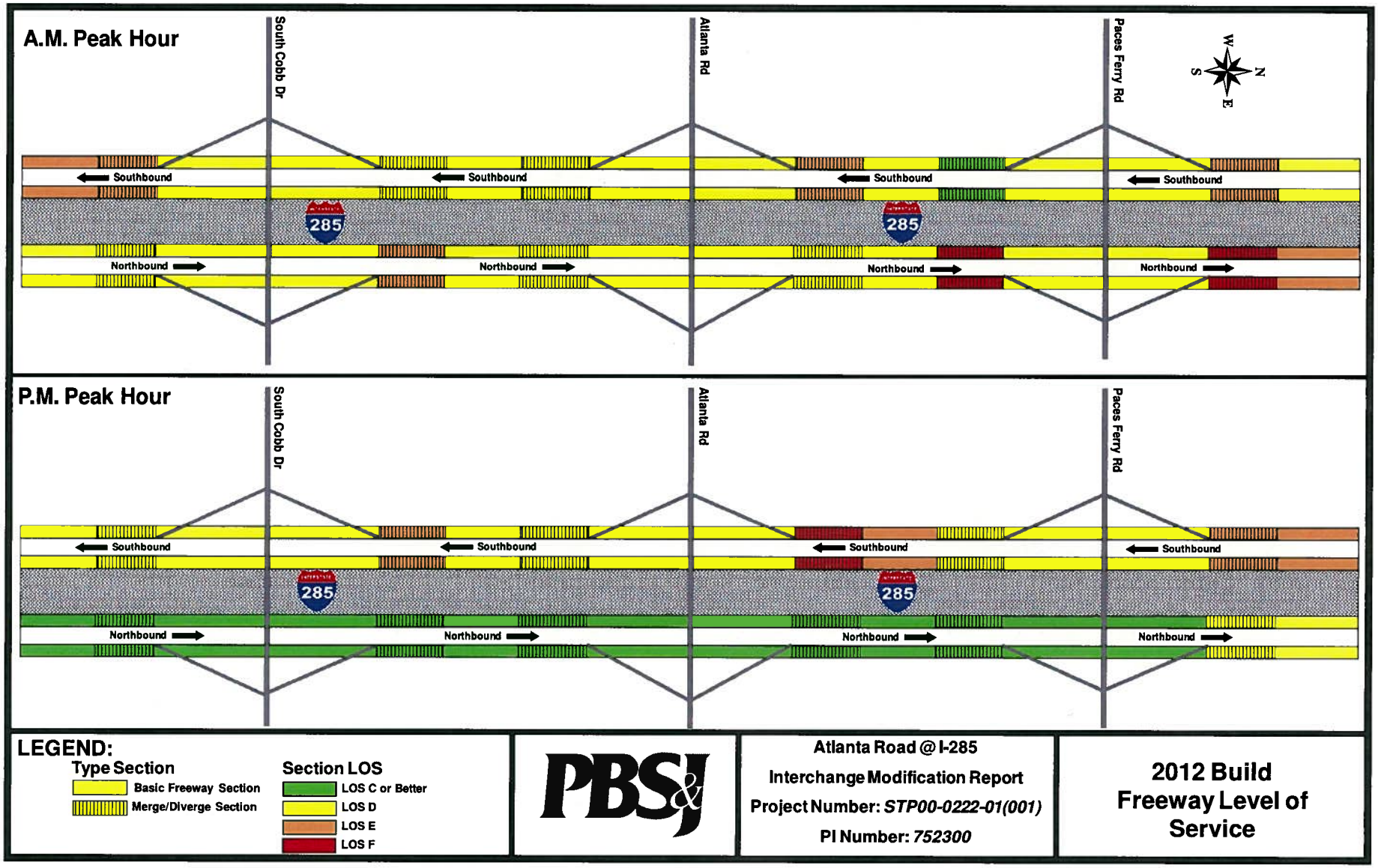
Interchange Modification Report

Project Number: *STP00-0222-01(001)*

PI Number: *752300*

2012 Build Intersection Level of Service

Figure 6.5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South Cobb Dr
Atlanta Rd
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P.M. Peak Hour
South Cobb Dr
Atlanta Rd
Paces Ferry Rd
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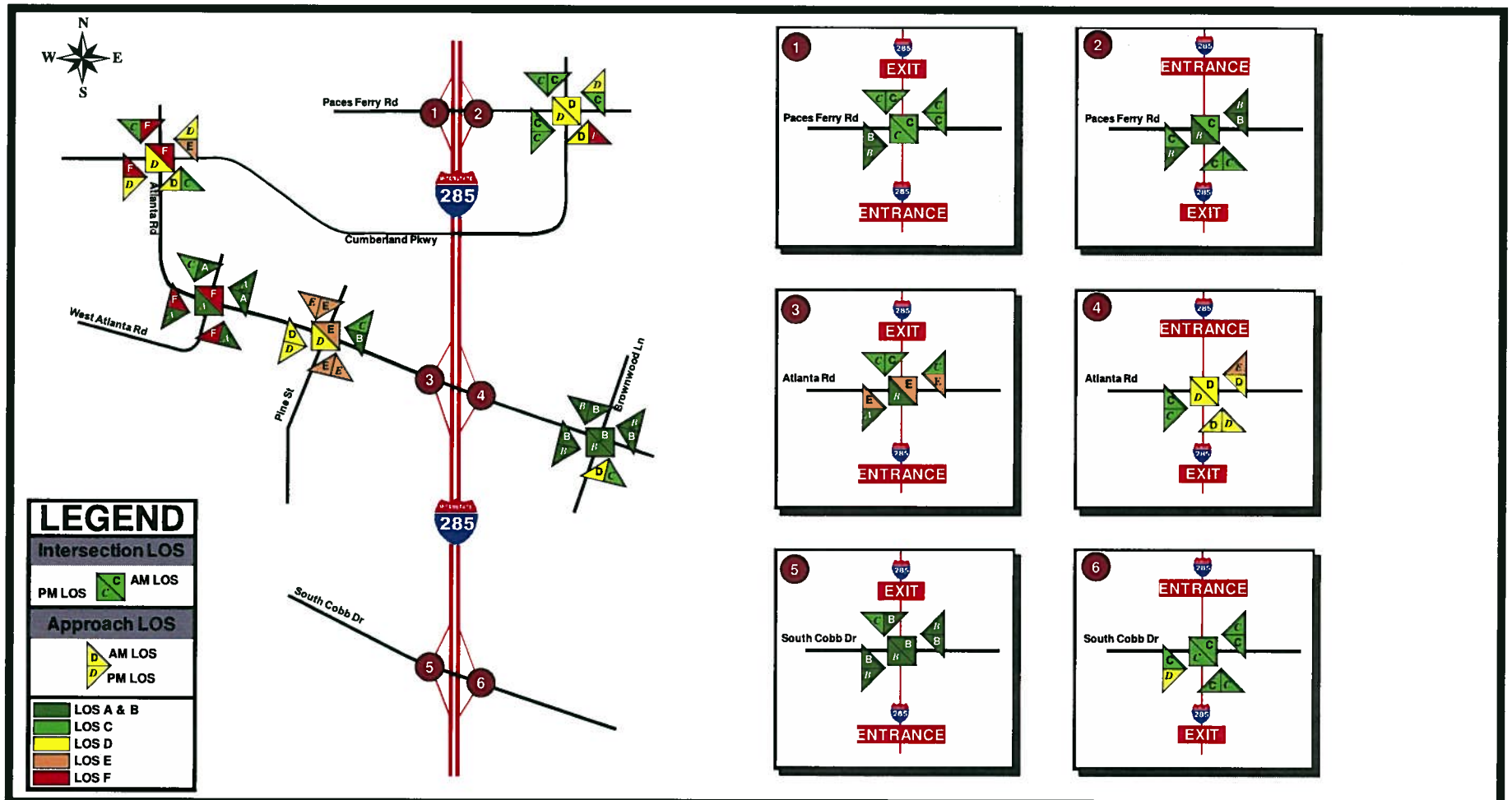
Northbound
Northbound
Northbound
LEGEND:
Type Section
Basic Freeway Section
Merge/Diverge Section
Section LOS
LOS C or Better
LOS D
LOS E
LOS F
PBSJ
Atlanta Road @ I-285
Interchange Modification Report
Project Number: STP00-0222-01(001)
PI Number: 752300
2012 Build
Freeway Level of
Service

Figure 6.6



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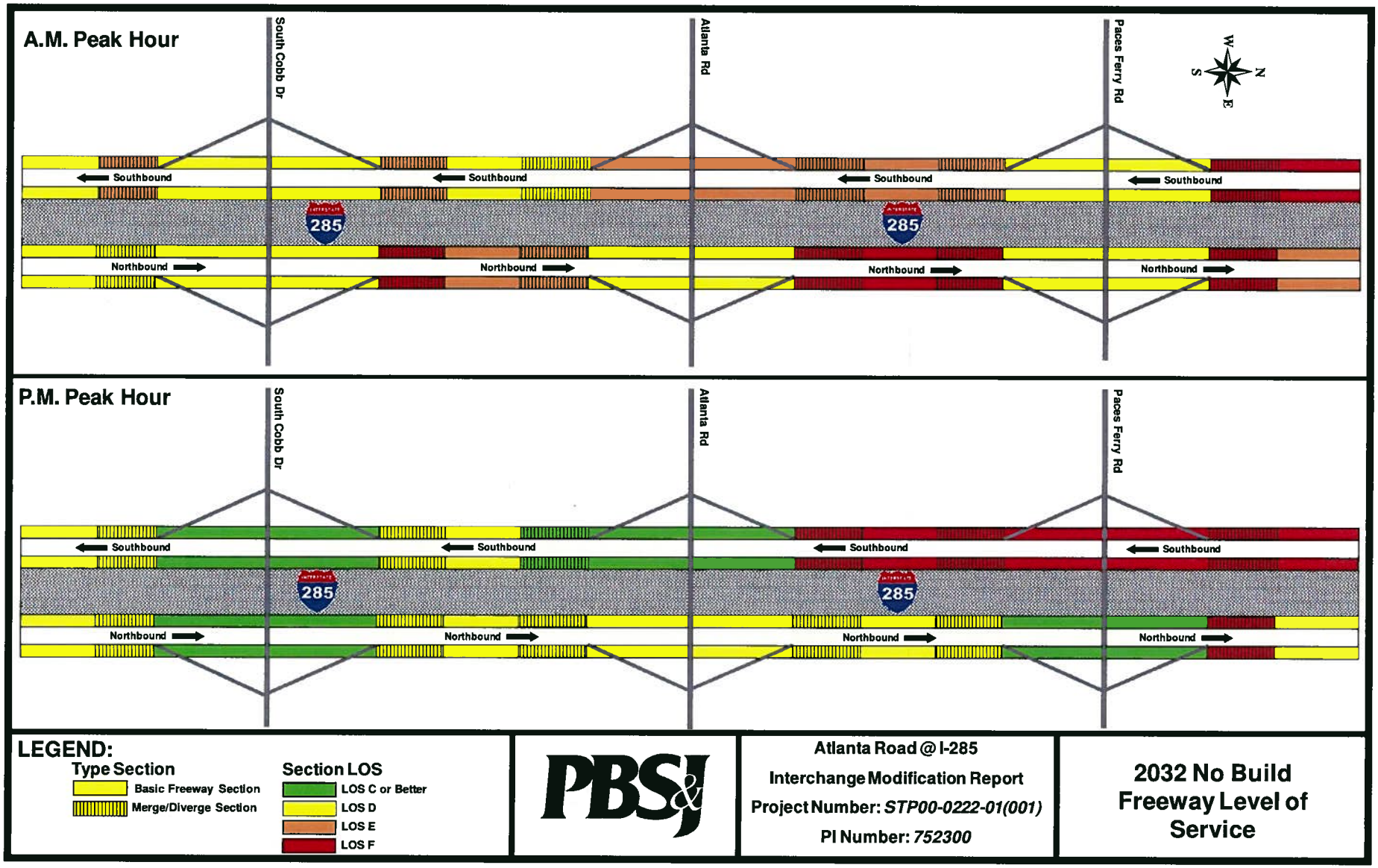
Atlanta Road @ I-285
Interchange Modification Report
Project Number: *STP00-0222-01(001)*
PI Number: *752300*

2032 No Build Intersection Level of Service

Figure 6.7


A.M. Peak Hour
South Cobb Dr
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Northbound
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P.M. Peak Hour
South Cobb Dr
Atlanta Rd
Paces Ferry Rd
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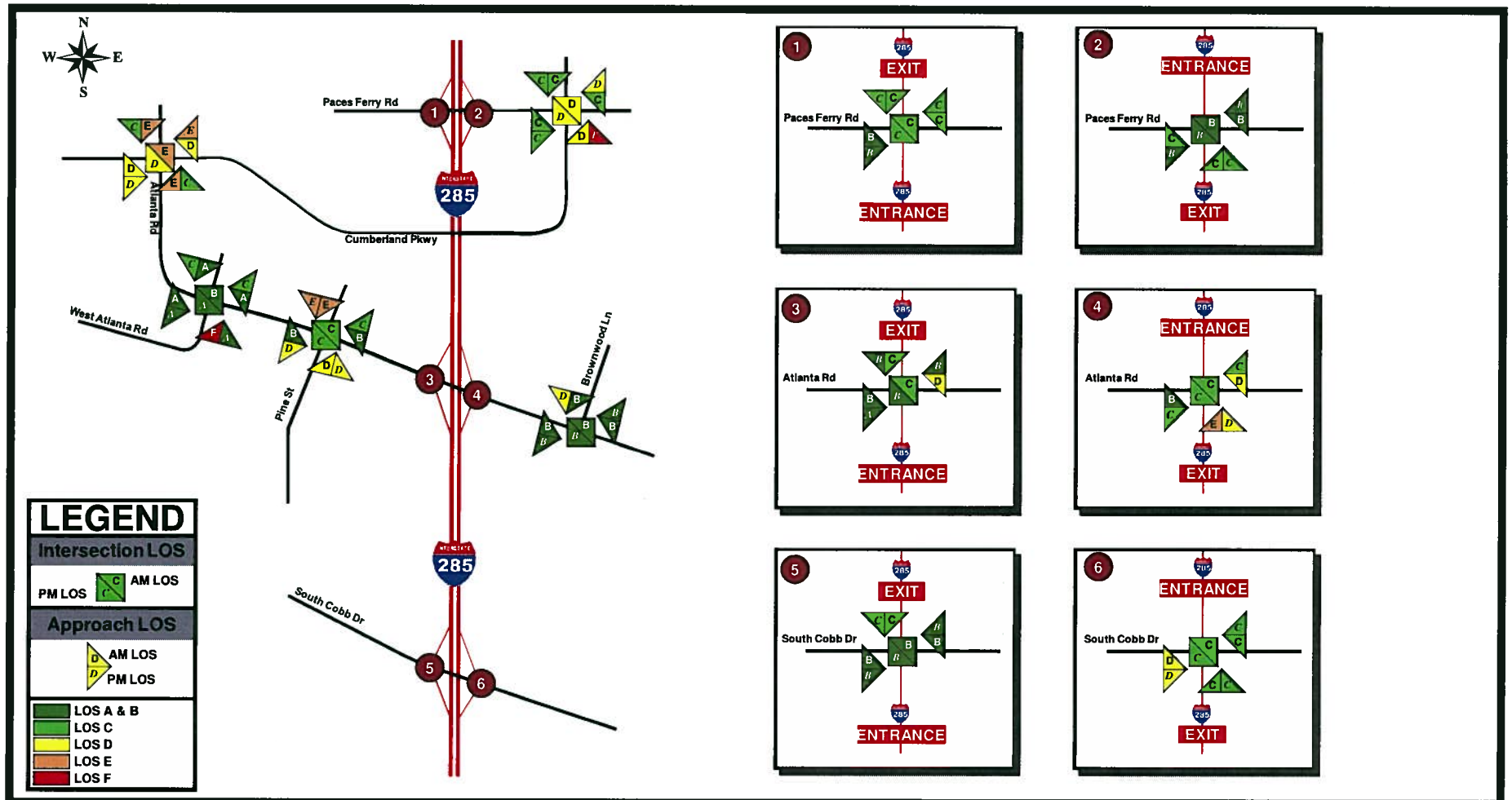
LEGEND:
Type Section
Basic Freeway Section
Merge/Diverge Section
Section LOS
LOS C or Better
LOS D
LOS E
LOS F
PBSJ
Atlanta Road @ I-285
Interchange Modification Report
Project Number: STP00-0222-01(001)
PI Number: 752300
2032 No Build
Freeway Level of
Service

Figure 6.8



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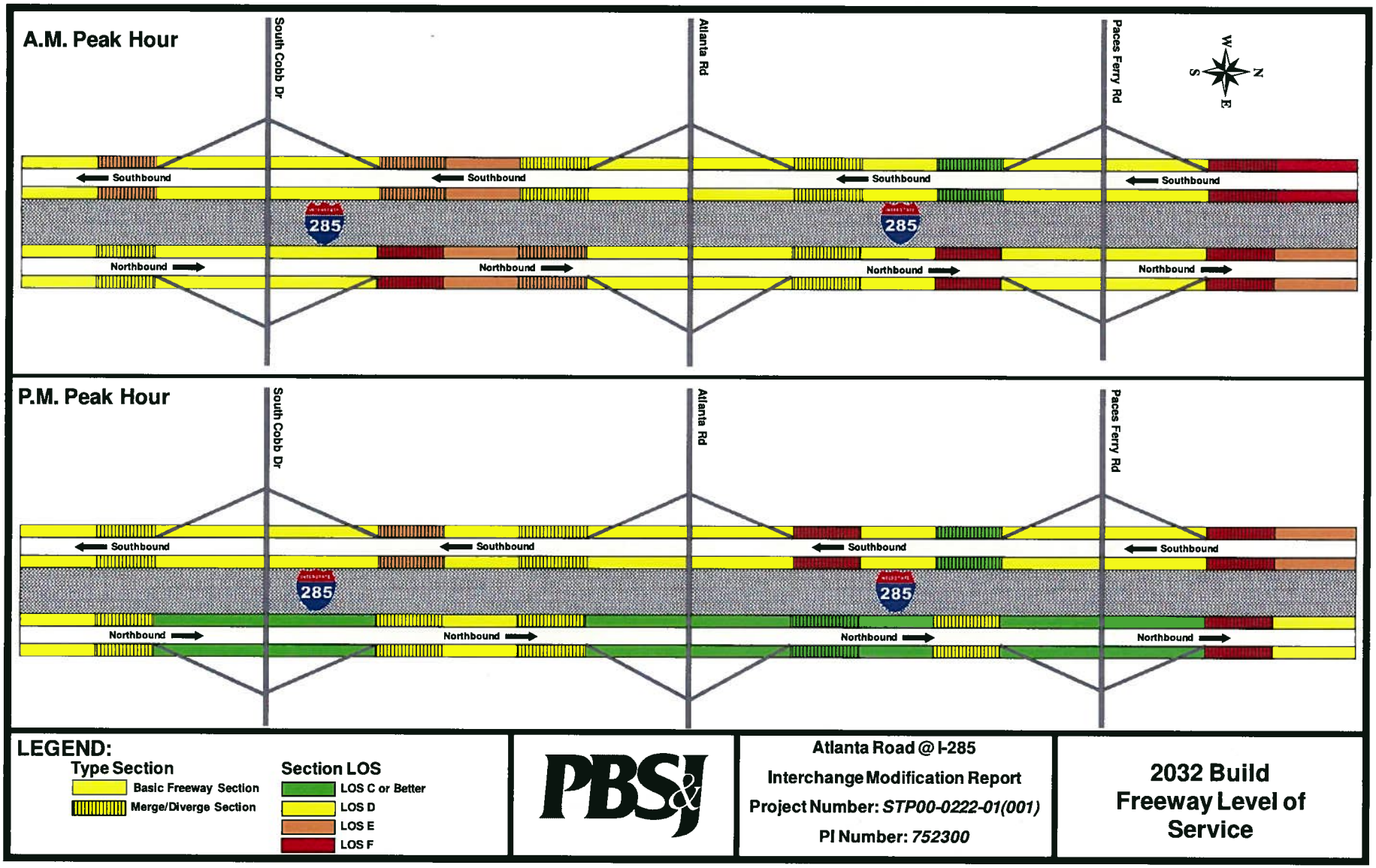
Atlanta Road @ I-285
Interchange Modification Report
Project Number: *STP00-0222-01(001)*
PI Number: *752300*

2032 Build Intersection Level of Service

Figure 6.9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South Cobb Dr
Atlanta Rd
Paces Ferry Rd
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Northbound
Northbound
Northbound
Northbound
P.M. Peak Hour
South Cobb Dr
Atlanta Rd
Paces Ferry Rd
Southbound
Southbound
Southbound
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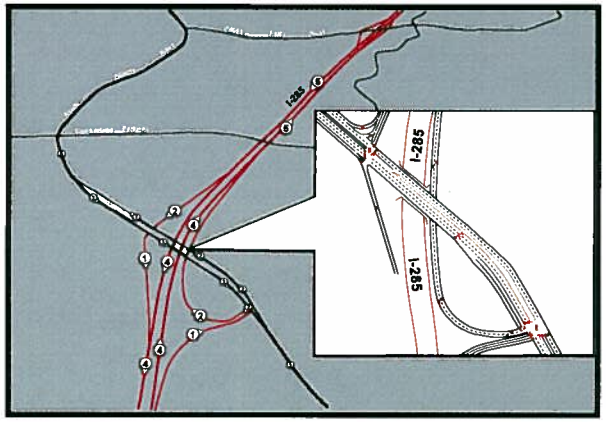
285
285
Northbound
Northbound
Northbound
Northbound
LEGEND:
Type Section
Basic Freeway Section
Merge/Diverge Section
Section LOS
LOS C or Better
LOS D
LOS E
LOS F
PBSJ
Atlanta Road @ I-285
Interchange Modification Report
Project Number: STP00-0222-01(001)
PI Number: 752300
2032 Build
Freeway Level of
Service

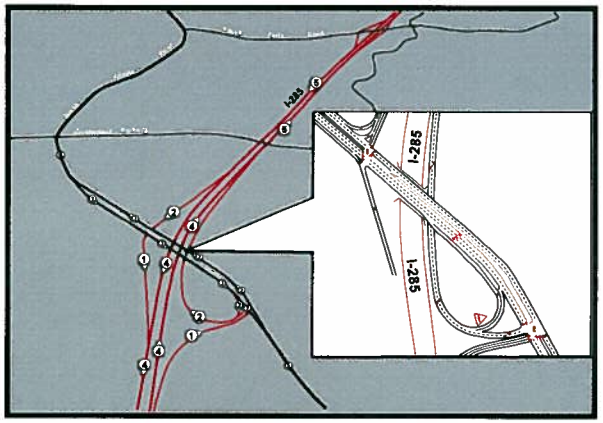
Figure 6.10

Attachment 4c

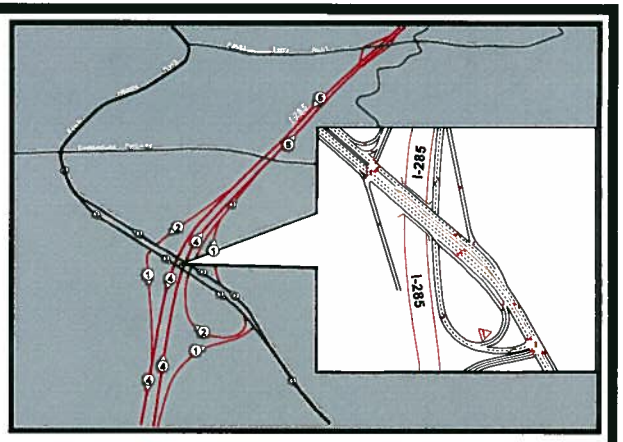
Capacity Analysis – Alternatives Analysis



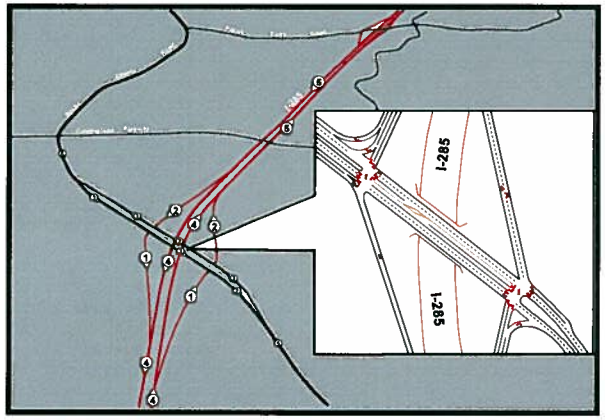
Alternate 1



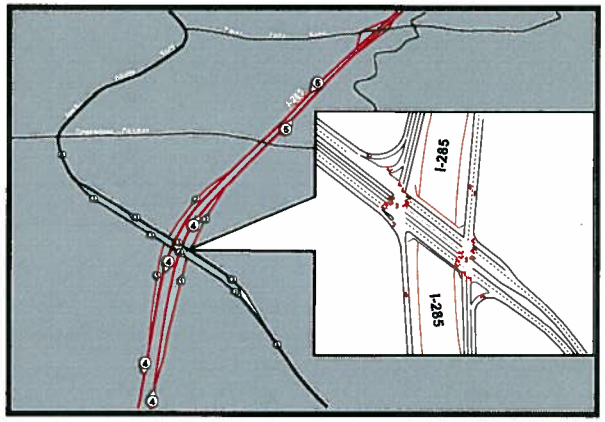
Alternate 1a



Alternate 2



Alternate 3



Alternate 4

PBSJ

Atlanta Road @ I-285

Interchange Modification Report

Project Number: ***STP00-0222-01(001)***

PI Number: ***752300***

Alternate Improvement Concepts Considered

Table 3.2

No Build 2030 A.M. Peak Hour
Freeway Sections Level of Service

Section	Direction	Type Section	2030 Volumes		Density (Veh./Lane/Mi.)	Speed (MPH)	LOS
			AM PK	CORSIM			
I-285 (South of Atlanta Road Exit Ramp)	Northbound	Merge/Diverge	7,050	7,052	32.7	49.5	D
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Northbound	Freeway	6,280	6,282	26.1	60.1	D
I-285 (North of Atlanta Road Entrance Ramp)	Northbound	Merge/Diverge	8,460	6,286	24.1	59.6	C
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Freeway	8,460	7,673	42.5	45.1	E
I-285 (South of Paces Ferry Road Exit Ramp)	Northbound	Merge/Diverge	8,460	7,687	27.3	52.3	C
I-285 (South of Paces Ferry Road Entrance Ramp)	Southbound	Merge/Diverge	5,740	5,737	18.9	63.3	B
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Freeway	5,740	5,736	18.6	61.6	C
I-285 (North of Atlanta Road Exit Ramp)	Southbound	Merge/Diverge	5,740	5,735	23.2	59.2	C
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Southbound	Freeway	4,950	4,930	20.0	61.6	C
I-285 (South of Atlanta Road Entrance Ramp)	Southbound	Merge/Diverge	5,770	5,431	25.2	56.8	C

Table 3.3

No Build 2030 P.M. Peak Hour
Freeway Sections Level of Service

Section	Direction	Type Section	2030 Volumes		Density (Veh./Lane/Mi.)	Speed (MPH)	LOS
			PM PK	CORSIM			
I-285 (South of Atlanta Road Exit Ramp)	Northbound	Merge/Diverge	6,620	6,641	41.1	34.2	E
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Northbound	Freeway	5,760	5,911	26.5	55.6	D
I-285 (North of Atlanta Road Entrance Ramp)	Northbound	Merge/Diverge	6,970	6,635	28.7	54.1	D
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Freeway	6,970	6,621	30.0	55.2	D
I-285 (South of Paces Ferry Road Exit Ramp)	Northbound	Merge/Diverge	6,970	6,617	24.6	54.6	C
I-285 (South of Paces Ferry Road Entrance Ramp)	Southbound	Merge/Diverge	8,800	8,607	61.8	22.4	F
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Freeway	8,800	8,490	72.9	23.0	F
I-285 (North of Atlanta Road Exit Ramp)	Southbound	Merge/Diverge	8,800	8,305	57.8	21.8	F
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Southbound	Freeway	7,580	7,306	34.3	53.2	E
I-285 (South of Atlanta Road Entrance Ramp)	Southbound	Merge/Diverge	7,710	7,531	31.0	49.7	D

Table 3.4

Alternate 1 2030 A.M. Peak Hour
Freeway Sections Level of Service

Section	Direction	Type Section	2030 Volumes		Density (Veh./Lane/Mi.)	Speed (MPH)	LOS
			AM PK	CORSIM			
I-285 (South of Atlanta Road Exit Ramp)	Northbound	Merge/Diverge	7,050	7,050	31.6	57.2	D
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Northbound	Freeway	6,280	6,300	25.9	60.8	D
I-285 (North of Atlanta Road Entrance Ramp)	Northbound	Merge/Diverge	8,460	8,489	28.5	57.0	D
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Weaving	8,460	8,508	36.8	56.5	E
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Freeway	8,460	8,508	33.0	51.5	E
I-285 (South of Paces Ferry Road Exit Ramp)	Northbound	Merge/Diverge	8,460	8,510	33.0	48.9	D
I-285 (South of Paces Ferry Road Entrance Ramp)	Southbound	Merge/Diverge	5,740	5,738	18.5	63.2	B
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Freeway	5,740	5,737	19.1	60.2	C
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Weaving	5,740	5,737	25.2	62.3	C
I-285 (North of Atlanta Road Exit Ramp)	Southbound	Merge/Diverge	5,740	5,739	24.1	57.0	C
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Southbound	Freeway	4,950	4,963	20.4	61.0	C
I-285 (South of Atlanta Road Entrance Ramp)	Southbound	Merge/Diverge	5,770	5,871	27.6	53.4	C

Table 3.5

Alternate 1 2030 P.M. Peak Hour
Freeway Sections Level of Service

Section	Direction	Type Section	2030 Volumes		Density (Veh./Lane/Mi.)	Speed (MPH)	LOS
			PM PK	CORSIM			
I-285 (South of Atlanta Road Exit Ramp)	Northbound	Merge/Diverge	6,620	6,620	29.3	59.5	D
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Northbound	Freeway	5,760	6,620	24.6	60.7	D
I-285 (North of Atlanta Road Entrance Ramp)	Northbound	Merge/Diverge	6,970	6,960	23.7	60.6	C
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Weaving	6,970	6,959	27.2	60.4	C
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Freeway	6,970	6,959	23.6	58.9	C
I-285 (South of Paces Ferry Road Exit Ramp)	Northbound	Merge/Diverge	6,970	6,961	26.6	56.3	C
I-285 (South of Paces Ferry Road Entrance Ramp)	Southbound	Merge/Diverge	8,800	8,798	30.0	57.9	D
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Freeway	8,800	8,793	39.6	44.4	E
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Weaving	8,800	8,793	45.8	47.6	F
I-285 (North of Atlanta Road Exit Ramp)	Southbound	Merge/Diverge	8,800	8,779	35.7	43.3	E
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Southbound	Freeway	7,580	7,259	35.8	50.8	E
I-285 (South of Atlanta Road Entrance Ramp)	Southbound	Merge/Diverge	7,710	7,377	31.1	53.0	D

Table 3.6

Alternate 1a 2030 A.M. Peak Hour
Freeway Sections Level of Service

Section	Direction	Type Section	2030 Volumes		Density (Veh./Lane/Mi.)	Speed (MPH)	LOS
			AM PK	CORSIM			
I-285 (South of Atlanta Road Exit Ramp)	Northbound	Merge/Diverge	7,050	7,052	21.3	62.0	C
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Northbound	Freeway	6,280	6,333	26.0	61.0	D
I-285 (North of Atlanta Road Entrance Ramp)	Northbound	Merge/Diverge	8,460	8,447	27.8	59.5	C
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Weaving	8,460	8,450	16.0	47.2	B
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Freeway	8,460	8,450	32.9	51.3	E
I-285 (South of Paces Ferry Road Exit Ramp)	Northbound	Merge/Diverge	8,460	8,441	18.1	63.2	B
I-285 (South of Paces Ferry Road Entrance Ramp)	Southbound	Merge/Diverge	5,740	5,738	26.2	61.8	C
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Freeway	5,740	5,742	18.8	60.9	C
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Weaving	5,740	5,742	23.2	53.3	C
I-285 (North of Atlanta Road Exit Ramp)	Southbound	Merge/Diverge	5,740	5,741	21.6	49.2	C
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Southbound	Freeway	4,950	4,984	20.2	61.5	C
I-285 (South of Atlanta Road Entrance Ramp)	Southbound	Merge/Diverge	5,770	5,895	23.7	42.2	C

Table 3.7

Alternate 1a 2030 P.M. Peak Hour
Freeway Sections Level of Service

Section	Direction	Type Section	2030 Volumes		Density (Veh./Lane/Mi.)	Speed (MPH)	LOS
			PM PK	CORSIM			
I-285 (South of Atlanta Road Exit Ramp)	Northbound	Merge/Diverge	6,620	6,620	29.3	59.5	D
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Northbound	Freeway	5,760	6,620	24.6	60.7	D
I-285 (North of Atlanta Road Entrance Ramp)	Northbound	Merge/Diverge	6,970	6,960	23.7	60.6	C
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Weaving	6,970	6,959	27.2	60.4	C
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Freeway	6,970	6,959	23.6	58.9	C
I-285 (South of Paces Ferry Road Exit Ramp)	Northbound	Merge/Diverge	6,970	6,961	26.6	56.3	C
I-285 (South of Paces Ferry Road Entrance Ramp)	Southbound	Merge/Diverge	8,800	8,798	30.0	57.9	D
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Freeway	8,800	8,793	39.6	44.4	E
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Weaving	8,800	8,793	45.8	47.6	F
I-285 (North of Atlanta Road Exit Ramp)	Southbound	Merge/Diverge	8,800	8,779	35.7	43.3	E
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Southbound	Freeway	7,580	7,259	35.8	50.8	E
I-285 (South of Atlanta Road Entrance Ramp)	Southbound	Merge/Diverge	7,710	7,377	31.1	53.0	D

Table 3.8

Alternate 2 2030 A.M. Peak Hour
Freeway Sections Level of Service

Section	Direction	Type Section	2030 Volumes		Density (Veh./Lane/Mi.)	Speed (MPH)	LOS
			AM PK	CORSIM			
I-285 (South of Atlanta Road Exit Ramp)	Northbound	Merge/Diverge	7,050	7,052	33.9	50.2	D
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Northbound	Freeway	6,280	6,302	26.3	59.8	D
I-285 (North of Atlanta Road Entrance Ramp)	Northbound	Merge/Diverge	8,460	8,345	27.1	57.8	C
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Weaving	8,460	8,346	36.9	56.6	E
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Freeway	8,460	8,346	32.8	50.9	E
I-285 (South of Paces Ferry Road Exit Ramp)	Northbound	Merge/Diverge	8,460	8,355	31.2	49.3	D
I-285 (South of Paces Ferry Road Entrance Ramp)	Southbound	Merge/Diverge	5,740	5,739	19.0	63.5	B
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Freeway	5,740	5,736	18.7	61.3	C
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Weaving	5,740	5,736	26.3	62.9	C
I-285 (North of Atlanta Road Exit Ramp)	Southbound	Merge/Diverge	5,740	5,740	25.0	58.1	C
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Southbound	Freeway	4,950	4,984	20.2	61.6	C
I-285 (South of Atlanta Road Entrance Ramp)	Southbound	Merge/Diverge	5,770	5,895	28.6	54.2	D

Table 3.9

Alternate 2 2030 P.M. Peak Hour
Freeway Sections Level of Service

Section	Direction	Type Section	2030 Volumes		Density (Veh./Lane/Mi.)	Speed (MPH)	LOS
			PM PK	CORSIM			
I-285 (South of Atlanta Road Exit Ramp)	Northbound	Merge/Diverge	6,620	6,615	29.5	58.1	D
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Northbound	Freeway	5,760	5,752	23.4	61.6	C
I-285 (North of Atlanta Road Entrance Ramp)	Northbound	Merge/Diverge	6,970	6,945	23.7	59.5	C
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Weaving	6,970	6,948	27.3	60.9	C
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Freeway	6,970	6,948	23.8	58.6	C
I-285 (South of Paces Ferry Road Exit Ramp)	Northbound	Merge/Diverge	6,970	6,964	26.5	56.1	C
I-285 (South of Paces Ferry Road Entrance Ramp)	Southbound	Merge/Diverge	8,800	8,797	30.7	56.4	D
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Freeway	8,800	8,797	35.7	49.2	E
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Weaving	8,800	8,797	40.3	57.3	E
I-285 (North of Atlanta Road Exit Ramp)	Southbound	Merge/Diverge	8,800	8,802	34.0	50.6	D
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Southbound	Freeway	7,580	7,612	32.6	58.4	E
I-285 (South of Atlanta Road Entrance Ramp)	Southbound	Merge/Diverge	7,710	7,725	30.6	56.3	D

Table 3.10

Alternate 3 2030 A.M. Peak Hour
Freeway Sections Level of Service

Section	Direction	Type Section	2030 Volumes		Density (Veh./Lane/Mi.)	Speed (MPH)	LOS
			AM PK	CORSIM			
I-285 (South of Atlanta Road Exit Ramp)	Northbound	Merge/Diverge	7,050	7,047	30.8	56.4	D
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Northbound	Freeway	6,280	6,280	25.8	60.7	D
I-285 (North of Atlanta Road Entrance Ramp)	Northbound	Merge/Diverge	8,460	8,571	37.9	38.0	E
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Weaving	8,460	8,597	39.8	53.1	E
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Freeway	8,460	8,597	35.8	47.9	E
I-285 (South of Paces Ferry Road Exit Ramp)	Northbound	Merge/Diverge	8,460	8,575	30.6	50.9	D
I-285 (South of Paces Ferry Road Entrance Ramp)	Southbound	Merge/Diverge	5,740	5,740	19.1	63.4	B
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Freeway	5,740	5,740	18.7	61.3	C
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Weaving	5,740	5,740	26.2	63.0	C
I-285 (North of Atlanta Road Exit Ramp)	Southbound	Merge/Diverge	5,740	5,738	24.9	58.7	C
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Southbound	Freeway	4,950	5,021	20.3	61.8	C
I-285 (South of Atlanta Road Entrance Ramp)	Southbound	Merge/Diverge	5,770	5,925	28.1	55.2	C

Table 3.11

Alternate 3 2030 P.M. Peak Hour
Freeway Sections Level of Service

Section	Direction	Type Section	2030 Volumes		Density (Veh./Lane/Mi.)	Speed (MPH)	LOS
			PM PK	CORSIM			
I-285 (South of Atlanta Road Exit Ramp)	Northbound	Merge/Diverge	6,620	6,617	28.6	59.1	D
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Northbound	Freeway	5,760	5,783	23.5	61.7	C
I-285 (North of Atlanta Road Entrance Ramp)	Northbound	Merge/Diverge	6,970	6,856	24.7	58.8	C
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Weaving	6,970	6,854	26.4	61.2	C
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Freeway	6,970	6,854	23.8	57.6	C
I-285 (South of Paces Ferry Road Exit Ramp)	Northbound	Merge/Diverge	6,970	6,848	24.6	56.4	C
I-285 (South of Paces Ferry Road Entrance Ramp)	Southbound	Merge/Diverge	8,800	8,798	28.8	61.7	D
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Freeway	8,800	8,801	34.6	50.9	E
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Weaving	8,800	8,801	39.7	57.0	E
I-285 (North of Atlanta Road Exit Ramp)	Southbound	Merge/Diverge	8,800	8,799	37.0	46.6	E
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Southbound	Freeway	7,580	7,630	33.4	57.0	E
I-285 (South of Atlanta Road Entrance Ramp)	Southbound	Merge/Diverge	7,710	7,781	30.8	56.4	D

Table 3.12

Alternate 4 2030 A.M. Peak Hour
Freeway Sections Level of Service

Section	Direction	Type Section	2030 Volumes		Density (Veh./Lane/Mi.)	Speed (MPH)	LOS
			AM PK	CORSIM			
I-285 (South of Atlanta Road Exit Ramp)	Northbound	Merge/Diverge	7,050	7,047	30.8	56.4	D
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Northbound	Freeway	6,280	6,280	25.8	60.7	D
I-285 (North of Atlanta Road Entrance Ramp)	Northbound	Merge/Diverge	8,460	8,571	37.9	38.0	E
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Weaving	8,460	8,597	39.8	53.1	E
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Freeway	8,460	8,597	35.8	47.9	E
I-285 (South of Paces Ferry Road Exit Ramp)	Northbound	Merge/Diverge	8,460	8,575	30.6	50.9	D
I-285 (South of Paces Ferry Road Entrance Ramp)	Southbound	Merge/Diverge	5,740	5,740	19.1	63.4	B
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Freeway	5,740	5,740	18.7	61.3	C
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Weaving	5,740	5,740	26.2	63.0	C
I-285 (North of Atlanta Road Exit Ramp)	Southbound	Merge/Diverge	5,740	5,738	24.9	58.7	C
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Southbound	Freeway	4,950	5,021	20.3	61.8	C
I-285 (South of Atlanta Road Entrance Ramp)	Southbound	Merge/Diverge	5,770	5,925	28.1	55.2	C

Table 3.13

Alternate 4 2030 P.M. Peak Hour
Freeway Sections Level of Service

Section	Direction	Type Section	2030 Volumes		Density (Veh./Lane/Mi.)	Speed (MPH)	LOS
			PM PK	CORSIM			
I-285 (South of Atlanta Road Exit Ramp)	Northbound	Merge/Diverge	6,620	6,617	28.6	59.1	D
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Northbound	Freeway	5,760	5,783	23.5	61.7	C
I-285 (North of Atlanta Road Entrance Ramp)	Northbound	Merge/Diverge	6,970	6,856	24.7	58.8	C
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Weaving	6,970	6,854	26.4	61.2	C
I-285 (Between Atlanta Rd.Entrance Ramp and Paces Ferry Rd. Exit Ramp)	Northbound	Freeway	6,970	6,854	23.8	57.6	C
I-285 (South of Paces Ferry Road Exit Ramp)	Northbound	Merge/Diverge	6,970	6,848	24.6	56.4	C
I-285 (South of Paces Ferry Road Entrance Ramp)	Southbound	Merge/Diverge	8,800	8,798	28.8	61.7	D
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Freeway	8,800	8,801	34.6	50.9	E
I-285 (Between Paces Ferry Rd. Entrance Ramp and Atlanta Rd.Exit Ramp)	Southbound	Weaving	8,800	8,801	39.7	57.0	E
I-285 (North of Atlanta Road Exit Ramp)	Southbound	Merge/Diverge	8,800	8,799	37.0	46.6	E
I-285 (Between Atlanta Road Exit and Entrance Ramps)	Southbound	Freeway	7,580	7,630	33.4	57.0	E
I-285 (South of Atlanta Road Entrance Ramp)	Southbound	Merge/Diverge	7,710	7,781	30.8	56.4	D

Attachment 5

Accident Summaries

QUERY SUMMARY
For Year(s): 2006,2007,2008

Year	County	Route Type	Route Number	Beginning Milelog	Ending Milelog	No. Accidents	No. Injuries	No. Fatalities
2006	Cobb	County Road	451900	1.88	2.79	81	14	0
2006	Cobb	County Road	204200	0.28	0.28	13	4	0
2006	Cobb	County Road	198900	0	0	4	0	0
2006	Cobb	County Road	197900	0.13	0.13	5	0	0
2006	Cobb	County Road	194400	0.02	0.02	1	0	0
					2006 SubTotal	104	18	0
2007	Cobb	County Road	451900	1.88	2.79	86	25	0
2007	Cobb	County Road	204200	0.28	0.28	0	0	0
2007	Cobb	County Road	198900	0	0	15	5	0
2007	Cobb	County Road	197900	0.13	0.13	5	1	0
2007	Cobb	County Road	194400	0.02	0.02	15	6	0
					2007 SubTotal	121	37	0
2008	Cobb	County Road	451900	1.88	2.79	89	12	0
2008	Cobb	County Road	204200	0.28	0.28	0	0	0
2008	Cobb	County Road	198900	0	0	11	1	0
2008	Cobb	County Road	197900	0.13	0.13	6	1	0
2008	Cobb	County Road	194400	0.02	0.02	13	4	0
					2008 SubTotal	119	18	0
					All Year(s)Total	344	73	0

ACCIDENT RATE CALCULATION for year(s)2006,2007,2008

Accident Data Information System

ACCIDENT RATE CALCULATION 2006

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	AADT	Distance	Vehicle Miles
2006	Cobb	2	451900	1.88	2.29	17,160	0.41	7,036
2006	Cobb	2	451900	2.29	2.79	37,270	0.50	18,635
2006	Cobb	County Road	204200	0	0	0	0	0
2006	Cobb	County Road	198900	0	0	0	0	0
2006	Cobb	County Road	197900	0	0	0	0	0
2006	Cobb	County Road	194400	0	0	0	0	0
Total Vehicle Miles: 25671	Total Accidents: 104	Accident Rate: 1110	Statewide Accident Rate: 531					
Average AADT: 28209	Total Injuries: 18	Injury Rate: 192	Statewide Injury Rate: 201					
Length In Miles: 0.91	Total Fatalities: 0	Fatality Rate: 0.00	Statewide Fatality Rate: 1.51					

NOTE: Rates are per 100 Million Vehicle Miles

ACCIDENT RATE CALCULATION 2007

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	AADT	Distance	Vehicle Miles
2007	Cobb	2	451900	1.88	2.29	17,880	0.41	7,331
2007	Cobb	2	451900	2.29	2.79	33,350	0.50	16,675
2007	Cobb	County Road	204200	0	0	0	0	0
2007	Cobb	County Road	198900	0	0	0	0	0
2007	Cobb	County Road	197900	0	0	0	0	0
2007	Cobb	County Road	194400	0	0	0	0	0
Total Vehicle Miles: 24006	Total Accidents: 121	Accident Rate: 1381	Statewide Accident Rate: 514					
Average AADT: 26380	Total Injuries: 37	Injury Rate: 422	Statewide Injury Rate: 190					
Length In Miles: 0.91	Total Fatalities: 0	Fatality Rate: 0.00	Statewide Fatality Rate: 1.47					

NOTE: Rates are per 100 Million Vehicle Miles

ACCIDENT RATE CALCULATION 2008

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	AADT	Distance	Vehicle Miles
2008	Cobb	2	451900	1.88	2.29	16,830	0.41	6,900
2008	Cobb	2	451900	2.29	2.79	35,380	0.50	17,690
2008	Cobb	County Road	204200	0	0	0	0	0
2008	Cobb	County Road	198900	0	0	0	0	0
2008	Cobb	County Road	197900	0	0	0	0	0
2008	Cobb	County Road	194400	0	0	0	0	0
Total Vehicle Miles: 24590	Total Accidents: 119	Accident Rate: 1326	Statewide Accident Rate: 471					
Average AADT: 27022	Total Injuries: 18	Injury Rate: 201	Statewide Injury Rate: 176					
Length In Miles: 0.91	Total Fatalities: 0	Fatality Rate: 0.00	Statewide Fatality Rate: 1.46					

NOTE: Rates are per 100 Million Vehicle Miles

QUERY SUMMARY

For Year(s): 2006,2007,2008

Year	County	Route Type	Route Number	Beginning Milelog	Ending Milelog	No. Accidents	No. Injuries	No. Fatalities
2006	Cobb	State Route	40700	1.27	4.3	417	96	0
					2006 SubTotal	417	96	0
2007	Cobb	State Route	40700	1.27	4.3	425	87	2
					2007 SubTotal	425	87	2
2008	Cobb	State Route	40700	1.27	4.3	370	101	1
					2008 SubTotal	370	101	1
					All Year(s)Total	1212	284	3

ACCIDENT RATE CALCULATION for year(s)2006,2007,2008

Accident Data Information System

ACCIDENT RATE CALCULATION 2006

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	ADT	Distance	Vehicle Miles
2006	Cobb	1	40700	1.27	1.28	152,920	0.01	1,529
2006	Cobb	1	40700	1.28	2.55	147,050	1.27	186,754
2006	Cobb	1	40700	2.55	4.1	152,330	1.55	236,112
2006	Cobb	1	40700	4.1	4.3	173,270	0.2	34,654
Total Vehicle Miles: 459048	Total Accidents: 417	Accident Rate: 249	Statewide Accident Rate: 200					
Average AADT: 151501	Total Injuries: 96	Injury Rate: 57	Statewide Injury Rate: 69					
Length In Miles: 3.03	Total Fatalities: 0	Fatality Rate: 0	Statewide Fatality Rate: 0.73					

NOTE: Rates are per 100 Million Vehicle Miles

ACCIDENT RATE CALCULATION 2007

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	ADT	Distance	Vehicle Miles
2007	Cobb	1	40700	1.27	1.28	151,380	0.01	1,514
2007	Cobb	1	40700	1.28	2.55	149,390	1.27	189,725
2007	Cobb	1	40700	2.55	4.1	156,280	1.55	242,234
2007	Cobb	1	40700	4.1	4.3	173,010	0.2	34,602
Total Vehicle Miles: 468075	Total Accidents: 425	Accident Rate: 249	Statewide Accident Rate: 186					
Average AADT: 154480	Total Injuries: 87	Injury Rate: 51	Statewide Injury Rate: 63					
Length In Miles: 3.03	Total Fatalities: 2	Fatality Rate: 1.17	Statewide Fatality Rate: 0.58					

NOTE: Rates are per 100 Million Vehicle Miles

ACCIDENT RATE CALCULATION 2008

Year	County	Rt Type	Route Num	Low Milelog	High Milelog	ADT	Distance	Vehicle Miles
2008	Cobb	1	40700	1.27	1.28	142,380	0.01	1,424
2008	Cobb	1	40700	1.28	2.55	146,100	1.27	185,547
2008	Cobb	1	40700	2.55	4.1	160,830	1.55	249,287
2008	Cobb	1	40700	4.1	4.3	169,770	0.2	33,954
Total Vehicle Miles: 470211	Total Accidents: 370	Accident Rate: 216	Statewide Accident Rate: 187					
Average AADT: 155185	Total Injuries: 101	Injury Rate: 59	Statewide Injury Rate: 63					
Length In Miles: 3.03	Total Fatalities: 1	Fatality Rate: 0.58	Statewide Fatality Rate: 0.62					

NOTE: Rates are per 100 Million Vehicle Miles

Attachment 6

Minutes of Initial Concept Team Meeting

PBS&J

Post, Buckley, Schuh & Jernigan, Inc.
Transportation Design
5665 New Northside Drive N.W., Suite 400
Atlanta, Georgia 30328
Phone 770/933-0280 Fax 770/933-1920

MEETING MINUTES

TO: *Attendees*

FROM: *Scott M. Dubord*

CC: *06-0525 File*

SUBJ: ***I-285 West @ Atlanta Road Interchange***
STP-222-1(1), PI 752300
Initial Concept Team Meeting

DATE: *February 19, 2007*

The Initial Concept Team Meeting (ICTM) for the I-285 West @ Atlanta Rd Interchange project in Cobb County was held on February 16, 2007 at 9:00 AM in the Urban Design Conference Room (Room 352) at the Georgia Department of Transportation at Two Capitol Square. The following is a list of attendees:

Denny Meier	**PBS&J**	**Brian Summers**	**GDOT-Eng Svc**
Scott Dubord	**PBS&J**	**James Harry**	**GDOT-Dist 7**
Darrell Richardson	**GDOT-Urban**	**Alex Laffey**	**GDOT–Dist 7**
Butch Welch	**GDOT-Urban**	**Mike Lobdell**	**GDOT- Dist 7**
Marcela Coll	**GDOT-Urban**	**Terry McCollister**	**GDOT-R/W**
David Jackson	**Cobb Co.**	**Wayne Fedora**	**FHWA**
Paul Condit	**GDOT/OEL**	**Roxanna Ene**	**GDOT-Planning**

The meeting was held to discuss the draft concept report and review the concept layout. PBS&J is the consultant hired by the County. Copies of the revised concept report were provided to all attendees. Hard copies of the Concept Report attachments were available on request.

The following items were discussed:

- Butch Welch began by welcoming the attendees and identifying the project specifics. PBS&J explained the basic design elements of the Interchange project, noting the two alternates under consideration.
    - Alternate 2 (the second overall concept considered, currently the preferred alternate) is a partial cloverleaf (PARCLO) interchange with a two–lane loop ramp in the SE quadrant to accommodate the heavy AM movement from EB Atlanta Rd to NB I-285. The bridge over I-285 replaces two twin bridges that allow for no left turns to I-285. The bridge section will carry 3 lanes EB and 2 thru lanes and a left turn lane

WB. The bridge spans over I-285 will accommodate the same future interstate section (5 lanes general purpose and 5 Lanes CD in both directions) as was accommodated at Paces Ferry Rd, Cumberland Pkwy & Mt. Wilkinson Pkwy. Auxiliary lanes will be added between Paces Ferry Rd and Atlanta Road in each direction. The Orchard Rd Bridge over I-285 will be replaced to accommodate this section. An additional bridge over the CSX railroad will also be required for the new I-285 NB exit ramp.

- Alternate 4 is a tight, urban diamond interchange (TUDI) concept. The proposed bridge length and skew places the two signalized intersections at the operational limit for a TUDI concept. The bridge section will carry 2-thru lanes and 2 left turn lanes EB and 2 thru lanes and a single left turn lane WB on Atlanta Road. Auxiliary lanes will be added between Paces Ferry Rd and Atlanta Road in each direction. The Orchard Rd Bridge over I-285 will be replaced to accommodate this section. The existing I-285 bridge over the CSX railroad will need to be widened.
- The overall LOS for both interchange concepts are nearly identical

- Darrell Richardson voiced concern over the existing length of limited access adjacent to the interchange and the proposed limit of access as part of the project. County would like to purchase limit of access rights EB from the entrance ramps to the Brownwood Lane intersection and WB to the new development entrance in the SW quadrant. This would eliminate access to the Pilot truck stop and adjacent warehouse building property in the SE quadrant. The raised median should be extended to this point in both Alternates as well.
- Wayne Fedora with FHWA voiced concern about the potential for wrong way movements with the alignment of the I-285 NB exit ramp with Brownwood Lane in Alt. 2. He recommended that the exit ramp alignment be shifted west toward the loop ramp, offset from Brownwood Lane. The Brownwood Lane/Atlanta Rd intersection would become a right-in, right-out access point.
- Mr. Fedora also noted that the Alternate numbering convention in the concept report (and displays) did not coincide with the numbering convention in the traffic technical memorandum. To help alleviate any discrepancies, Mr. Fedora suggested that figures be added to the body of the Concept Report diagramming the different alternates.
- David Jackson with Cobb County DOT noted that there has been discussion between local neighborhood officials and the County about possibly severing the connection of Orchard Road at I-285. GDOT suggested that the Public Information Open House (PIOH) handout be re-structured to include a question about this issue. However, the State reiterated to the County that they would not get involved in a local decision regarding the Orchard Rd closure. The State will replace the bridge according to the project design unless told other wise.
- A discussion regarding sound barrier placement adjacent to I-285 to accommodate possible future projects concluded with a decision to treat it for this project only at this time.
- Mr. Fedora asked the project team about the origin of the 5, 5, 5, 5 lane section along I-285, and noted that, at this time with the potential for HOV & truck-only facilities, the section could be more like 3,7,7,3. The State said that the decision to design the bridge with the same span footprint as what was assumed for Paces Ferry, Cumberland Pkwy & Mt. Wilkinson was satisfactory. No more information is known at this time as to what might be designed along I-285.

- The proposed bridges at I-285 will be designed to accommodate the proper vertical clearances for the full 5,5,5,5 lane section.
- GDOT noted that the existing inside shoulder width of 6'-9" does not match the desirable 12' width that is currently being set on other interstate projects. GDOT asked FHWA if they would ask for the full12' shoulder as part of this design, or if the existing shoulder can be maintained. FHWA said that they would prefer a consistent footprint thru the corridor and that the full 12' shoulder could be accommodated in the future I-285 project. The sub-standard shoulder will require a design exception, which will need to be reflected in the concept report and included with the concept report package upon its resubmittal.
- An IMR will be required for the project and will need to be submitted with the Concept Report package.
- The accident data for the interchange area should be reported as a summary table within the Concept Report and compared with statewide averages rather than posting raw data as an attachment.
- Cost estimate
    - GDOT Engineering Services noted that the cost for the Atlanta Road bridge should be increased to $90-100 per sq. ft. due to the long span (bulb T's) and recent bid tabs.
    - Traffic control needs to be increased significantly ($1-2M) to account for traffic control operations along I-285.
    - Revise earthwork quantities and cost to coincide with updated database
    - R/W cost must be submitted to GDOT-R/W for review and approval. PBS&J to submit concept layouts to Jerry Milligan (and CC: Urban Design) for review.
- GDOT Engineering Services noted that a VE study will be required for the project and that since the County is paying for the PE, a VE would need to be added to the PE scope. If an LPGA has been prepared, it will need to be updated to show VE and SUE investigations.
- FHWA reminded the group that a ramp-metering and ATMS project along I-285 is scheduled for letting this year that will add conduit along the corridor
- GDOT R/W was concerned about the right-of-way and parking impacts to the out-parcels of the new development in the SW quadrant. Cobb County noted that significant r/w donations were made during the permitting of the development.
- Concept Report
    - PBS&J to refer to the most recent concept report template that includes a note about railroad involvement.
    - The ARC RTP model diagram for the interchange should be included as an attachment. Alt. 2 is currently in the model.
    - PBS&J Environmental group to utilize "Need & Purpose" format provided by Urban Design. PBS&J to submit the need and purpose separately for review.
    - PBS&J to elaborate on the "Additional Projects in the area" section of the concept report to include the ATMS & ramp-metering projects noted by FHWA
- PIOH is currently scheduled for March 8, 2007. Urban Design to coordinate with OEL to schedule a Dry Run.
- PBS&J to provide a detailed environmental schedule (CE assumed) and overall project schedule thru PFPR ASAP. This timeline should be realistic and should include time for reviews and the VE study (after concept approval).

- GDOT to provide PBS&J with a list of utility owners in the corridor. It was noted that Railroad Coordination is expected.

Action Items:

- *Revise layout and concept report as noted above. Prepare layouts and necessary handouts for PIOH; schedule PIOH Dry Run*
- *Update the construction cost estimate as recommended*
- *Send concept layout to GDOT-R/W for review*
- *Submit project schedule for review*

This document represents Post, Buckley, Schuh, & Jernigan, Inc.'s interpretation of the meeting. Please contact the project manager if you have any questions.

Sincerely,

Scott M. Dubord, P.E.
Project Manager

Attachment 7

Summary of Public Comments

BUCHAN
HASTY
RICHARDSON
VANMETER
OTHER
GROUPS
FILE

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

APR - 5 2007

INTERDEPARTMENT CORRESPONDENCE

FILE: P.I. No. 752300
OFFICE: Environment/Location

DATE: April 3, 2007
HDK/mm
FROM: Harvey D. Keepler, State Environmental/Location Engineer

TO: Distribution Below

SUBJECT: Project STP-222-1(1) Cobb County, Summary of Comments Received During the Public Comment Period – I-285 West at Atlanta Road Interchange Improvements.

COMMENT TOTALS:

A total of 126 people attended the Public Information Open House held at the Smyrna Precinct 3 Police Station on Cumberland Boulevard on March 8, 2007. Of those attending, 70 comment forms and 17 verbal statements were received. 45 additional comments were received during the ten day comment period following the Public Information Open House, for a total of 132 comments. There were 9 people who commented twice, and one person commented three times; however, they are only noted once in the table below. In addition, some individuals responded with more than one major concern. The positions are summarized as follows:

	No. Opposed	Support	Uncommitted	Conditional
Total	**1**	**53**	**24**	**43**
Alternate 2	--	47	3	32
Alternate 4	--	4	1	3
Unspecified	--	2	20	8

MAJOR CONCERNS:
Of the responses received, forty-one respondents would like noise barriers installed along I-285. Twenty-one people made comments about the lack of access to Winchester Parkway in the proposed plans. Of those, nineteen of the same people are concerned about the offset intersection at Brownwood Lane and the I-285 exit ramp, and

that there is no traffic light at Atlanta Road and Pine Street. In addition, they would like a pedestrian bridge from Winchester Parkway to the West Village center. Six people are concerned with access to their businesses if a median is installed. Five people made comments regarding their desire to see the Pilot gas station removed. Four people would like plants or bushes installed as part of the project. There were three comments regarding the extra traffic that will be caused from the West Village center. Two people would like bike lanes added to the plans. Two people are concerned about access from East-West connector to I-285. One person requested that the city, county and state work closer on planning projects. One person is concerned with how long the project will take to complete. One person is against the project because it will displace his business. One comment does not want another SPLOST implemented to fund this project. One comment would like a left turn lane out of the Waffle House onto Atlanta Road northbound. One comment is concerned about the poor signal timing. One comment would like a double left turn from Atlanta Road to East/West Connector. One comment is from a business on Atlanta Road that would like better access to Atlanta Road. Nine people specifically made comments in opposition to the closing of Orchard Road. Further, of the 69 respondents that answered the question regarding closing Orchard Road, 64 were opposed to closing the road, and five were in favor.

OFFICIALS:

Officials attending included the following:

Wade Lnenicka, City of Smyrna

DISPOSITION OF COMMENTS:

PBS&J will respond to all comments. All responses will be coordinated with any appropriate GDOT office as necessary.

Attached is a complete transcript of the comments received during the comment period and a copy of the meeting handout.

If you have any questions about the comments, please call Paul Condit at (404) 699-4413.

HDK/pc/csv(PBSJ)

Attachments

DISTRIBUTION:
cc: David Jackson, Cobb County
Keisha Jackson, GDOT
Butch Welch, GDOT
Marcela Coll, GDOT

Attachment 8

Bridge Inventory Sheets

Processed Date:1/6/2010

Parameters: Bridge Serial Num

Bridge Inventory Data Listing

Structure ID:067-0002-0 **Cobb** **SUFF. RATING:** 54.62

Location & Geography

Structure ID:	067-0002-0
200 Brdge Information:	06
*6A Feature Int:	I-285
*6B Critical Bridge:	0
*7A Route No Carried:	CR04519
*7B Facility Carried:	ATLANTA ROAD NBL
9 Location:	3.5 MI SE OF SMYRNA
2 Dot District:	7
207 Year Photo:	2009
*91 Inspection Frequency:	24 Date: 06/11/2009
92A Fract Crit Insp Freq:	0 Date: 02/01/1901
92B Underwater Insp Freq:	0 Date: 02/01/1901
92C Other Spc. Insp Freq:	0 Date: 02/01/1901
* 4 Place Code:	00000
*5 Inventory Route(O/U):	1
Type:	5
Designation:	1
Number:	09003
Direction:	0
*16 Latitude:	33 - 50.5973 HMMS Prefix:00
*17 Longtitude:	84 - 29.253 HMMS Suffix:000 MP:0.00
98 Border Bridge:	000%Shared:00
99 ID Number:	000000000000000
*100 STRAHNET:	0
12 Base Highway Network:	1
13A LRS Inventory Route:	672451900
13B Sub Inventory Route:	0
101 parellel Structure:	R
*102 Direction of Traffic:	1
*264 Road Inventory Mile Post:	002.27
*208 Inspection Area:	7 Initials: EFP
Engineer's Initials:	sgm
* Location ID No:	067-09003M-002.27N

*104 Highway System:	0
*26 Functional Classification:	16
*204 Federal Route Type:	M No: 09003
105 Federal Lands Highway:	0
*110 Truck Route:	0
2006 School Bus Route:	0
217 Benchmark Elevation:	0000.00
218 Datum:	0
*19 Bypass Length:	01
*20 Toll:	3
*21 Maintanance:	01
*22 Owner:	01
*31 Design Load:	6
37 Historical Significance:	5
205 Congressional District:	13
27 Year Constructed:	1969
106 Year Reconsrtucted:	0000
33 Bridge Medium:	1
34 Skew:	40
35 Structure Flared:	0
38 Navigation Control:	N
213 Special Steel Design:	0
267 Type of Paint:	5
*42 Type of Service On:	5
Type of Service Under:	1
214 Movable Bridge:	0
203 Type Bridge:	O
259 Pile Encasement	3
*43 Structure Type Main:	4 02
45 No.Spans Main:	004
44 Structure Type Appr:	0 00
46 No Spans Appr:	0000
226 Bridge Curve Horz	0 Vert: 1
111 pier Protection	0
107 Deck Structure Type:	1
108 Wearing Structure Type:	1
Membrane Type:	0
Deck Protection:	0

Signs & Attachments

225 Expansion Joint Type:	15
242 Deck Drains:	0
243 Parapet Location:	0
Height:	0
Width:	0
238 Curb Height:	1
Curb Material:	1
239 Handrail	7 7
*240 Medium Barrier Rail:	0
241 Bridge Median Height:	0
* Bridge Median Width:	0
230 Guardrail Loc. Dir. Rear:	3
Fwrd:	2
Oppo. Dir. Rear:	0
Oppo. Fwrd:	0
244 Aproach Slab	3
224 Retaining Wall:	0
233Posted Speed Limit:	45
236 Warning Sign:	0.00
234 Delineator:	1.00
235 Hazzard Boards:	0
237 Utilities Gas:	00
Water:	21
Electric:	00
Telephone:	22
Sewer:	00
247 Lighting Street:	0
Navigation:	0
Aerial:	0
*248 County Continuity No.:	00

File Location: CF Conversions/BIMS

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Processed Date:1/6/2010

Parameters: Bridge Serial Num

Bridge Inventory Data Listing

Structure ID:067-0002-0

Programming Data

201 Project No:	I-285-1 (55) 80 CT.4
202 Plans Available:	4
249 Prop Proj No:	000000000000000000000000
250 Approval Status:	0000
251 PI Number:	0000000
252 Contract Date:	02/01/1901
260 Seismic No:	00000
75 Type Work:	00 0
94 Bridge Imp. Cost:	$0
95 Roadway Imp. Cost:	0
96 Total Imp Cost:	0
76 Imp Length:	000000
97 Imp Year:	0000
114Future ADT:	050025 Year:2027

Hydralic Data

215Waterway Data:	
High Water Elev:	0000.0 Year:1900
Flood Elev:	0000.0 Freq:00
Avg Streambed Elev:	0000.0
Drainage Area:	00000
Area of Opening:	000000
113 Scour Critical	N
216Water Depth:	00.0 Br.Height:00.0
222Slope Protection:	4
221Slope Protection	0 Fwd:0
219Fender System	0
220Dolphin:	0
223Current Cover:	000
Type:	0
No. Barrels:	0
* Width:	0.00 Height:0.00
* Length:	0 Apron:0
265 U/W Insp. Area	0 Diver:ZZZ
Location ID No:	067-09003M-002,27N

Measurements

*29ADT	033350 Year:2007
109%Trucks:	0
* 28 Lanes On:	02 Under:08
210 No. Tracks On:	00 Under:00
* 48 Max. Span Length	0092
* 49 Structure Length:	318
51 Br. Rwdy. Width	28.20
52 Deck Width:	36.00
* 47 Tot. Horiz. Cl:	28
50 Curb / Sidewalk Width	2.00 / 5.00
32 Approach Rdwy. Width	024
*229 Shoulder Width:	
Rear Lt:	4.00 Type:5 Rt:2.00
Fwd. Lt:	4.00 Type:5 Rt:2.00
Permanent Width:	
Rear:	24.00 Type:5
	24.00 Type:2
Intersaction Rear:	1 Fwd: 1
36Safety Features Br. Rail:	2
Transition:	2
App. G. Rail:	1
App. Rail End:	2
53 Minimum Cl. Over:	99' 99 "
Under:	
*228 Minimum Vertical Cl	
Act. Odm Dir::	99' 99"
Oppo. Dir:	99' 99"
Posted Odm. Dir:	00' 00"
Oppo. Dir:	00' 00"
55 Lateral Undercl. Rt:	H 11 11
56 Lateral Undercl. Lt:	4.10
*10 Max Min Vert Cl:	99' 99" Dir:0
39 Nav Vert Cl:	000 Horiz:0000
116 Nav Vert Cl Closed:	000
245 Deck Thickness Main	7.00
Deck Thick Approach:	0.00
246 Overlay Thickness:	0.00
212 Year Last Painted:	Sup:1997Sub:0000

65 Inventory Rating Mathod:	1
63 Operating Rating Method:	1
66 Inventory Type:	2 Rating: 20
64 Operating Type:	2 Rating: 20
231Calculated Loads:	
H-Modified:	21 0
HS-Modified:	26 0
Type 3:	25 0
Type 3s2:	27 0
Timber:	26 0
Piggyback:	00 0
261 H Inventory Rating:	18
262 H Operating Rating	30
67 Structural Evaluation:	4
58 Deck Condition:	6
59 Superstructure Condition:	7
* 227 Collision Damage:	1
60A Substructure Condition:	7
60B Scour Condition:	N
60C Underwater Condition	N
71 Waterway Adequacy:	N
61 Channel Protection Cond.:	N
68 Deck Geometry:	3
69 UnderClr. Horz/Vert:	6
72 Appr. Alignment:	8
62 Culvert:	N

Posting Data

70 Bridge Posting Required	5
41 Struct Open, Posted, CL:	A
* 103 Temporary Structure:	0
232 Posted Loads	
H-Modified:	00
HS-Modified:	00
Type 3:	00
Type 3s2:	00
Timber:	00
Piggyback	00
253 Notification Date:	02/01/1901
258 Fed Notify Date:	2/1/1901 12:00:00AM

File Location: CF Conversions/BIMS

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Processed Date:1/6/2010

Parameters: Bridge Serial Num

Bridge Inventory Data Listing

Structure ID:067-0003-0 **Cobb** **SUFF. RATING:** 53.52

Location & Geography

Structure ID:	067-0003-0
200 Brdge Information:	06
*6A Feature Int:	I-285
*6B Critical Bridge:	0
*7A Route No Carried:	CR04519
*7B Facility Carried:	ATLANTA ROAD SBL
9 Location:	3.5 MI SE OF SMYRNA
2 Dot District:	7
207 Year Photo:	2009
*91 Inspection Frequency:	24 Date: 04/21/2009
92A Fract Crit Insp Freq:	0 Date: 02/01/1901
92B Underwater Insp Freq:	0 Date: 02/01/1901
92C Other Spc. Insp Freq:	0 Date: 02/01/1901
* 4 Place Code:	00000
*5 Inventory Route(O/U):	1
Type:	5
Designation:	1
Number:	09003
Direction:	0
*16 Latitude:	33 " 50.5853 HMMS Prefix:00
*17 Longitude:	84 - 29.257 HMMS Suffix:000 MP:0.00
98 Border Bridge:	000%Shared:00
99 ID Number:	000000000000000
*100 STRAHNET:	0
12 Base Highway Network:	1
13A LRS Inventory Route:	672451900
13B Sub Inventory Route:	0
101 parellel Structure:	L
*102 Direction of Traffic:	1
*264 Road Inventory Mile Post:	002.28
*208 Inspection Area:	7 Initials: EFP
Engineer's Initials:	sgm
* Location ID No:	067-09003M-002.28N

*104 Highway System:	0
*26 Functional Classification:	16
*204 Federal Route Type:	M No: 00000
105 Federal Lands Highway:	0
*110 Truck Route:	0
2006 School Bus Route:	0
217 Benchmark Elevation:	0000.00
218 Datum:	0
*19 Bypass Length:	01
*20 Toll:	3
*21 Maintanance:	01
*22 Owner:	01
*31 Design Load:	6
37 Historical Significance:	5
205 Congressional District:	13
27 Year Constructed:	1969
106 Year Reconsrtucted:	0000
33 Bridge Medium:	1
34 Skew:	40
35 Structure Flared:	0
38 Navigation Control:	N
213 Special Steel Design:	0
267 Type of Paint:	5
*42 Type of Service On:	5
Type of Service Under:	1
214 Movable Bridge:	0
203 Type Bridge:	O
259 Pile Encasement	3
*43 Structure Type Main:	4 02
45 No.Spans Main:	004
44 Structure Type Appr:	0 00
46 No Spans Appr:	0000
226 Bridge Curve Horz	0 Vert: 1
111 pier Protection	0
107 Deck Structure Type:	1
108 Wearing Structure Type:	1
Membrane Type:	0
Deck Protection:	0

Signs & Attachments

225 Expansion Joint Type:	15
242 Deck Drains:	0
243 Parapet Location:	0
Height:	0
Width:	0
238 Curb Height:	1
Curb Material:	1
239 Handrail	7 7
*240 Medium Barrier Rail:	0
241 Bridge Median Height:	0
* Bridge Median Width:	0
230 Guardrail Loc. Dir. Rear:	3
Fwrd:	3
Oppo. Dir. Rear:	0
Oppo. Fwrd:	0
244 Aproach Slab	3
224 Retaining Wall:	0
233Posted Speed Limit:	45
236 Warning Sign:	0.00
234 Delineator:	1.00
235 Hazzard Boards:	0
237 Utilities Gas:	21
Water:	21
Electric:	00
Telephone:	00
Sewer:	21
247 Lighting Street:	0
Navigation:	0
Aerial:	0
*248 County Continuity No.:	00

File Location: CF Conversions/BIMS

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Processed Date:1/6/2010

Parameters: Bridge Serial Num

Bridge Inventory Data Listing

Structure ID:067-0003-0

Programming Data

201 Project No:	I-285-1 (55) 80 CT.4
202 Plans Available:	4
249 Prop Proj No:	000000000000000000000000
250 Approval Status:	0000
251 PI Number:	0000000
252 Contract Date:	02/01/1901
260 Seismic No:	00000
75 Type Work:	00 0
94 Bridge Imp. Cost:	$0
95 Roadway Imp. Cost:	0
96 Total Imp Cost:	0
76 Imp Length:	000000
97 Imp Year:	0000
114Future ADT:	050025 Year:2027

Hydralic Data

215Waterway Data:	
High Water Elev:	0000.0 Year:1900
Flood Elev:	0000.0 Freq:00
Avg Streambed Elev:	0000.0
Drainage Area:	00000
Area of Opening:	000000
113 Scour Critical	N
216Water Depth:	00.0 Br.Height:00.0
222Slope Protection:	4
221Slope Protection	0 Fwd:0
219Fender System	0
220Dolphin:	0
223Current Cover:	000
Type:	0
No. Barrels:	0
* Width:	0.00 Height:0.00
* Length:	0 Apron:0
265 U/W Insp. Area	0 Diver:ZZZ
Location ID No:	067-09003M-002.28N

Measurements

*29ADT	033350 Year:2007
109%Trucks:	0
* 28 Lanes On:	02 Under:08
210 No. Tracks On:	00 Under:00
* 48 Max. Span Length	0092
* 49 Structure Length:	318
51 Br. Rwdy. Width	28.20
52 Deck Width:	36.00
* 47 Tot. Horiz. Cl:	28
50 Curb / Sidewalk Width	2.00 / 5.00
32 Approach Rdwy. Width	024
*229 Shoulder Width:	
Rear Lt:	4.00 Type:8 Rt:2.00
Fwd. Lt:	4.00 Type:8 Rt:2.00
Permanent Width:	
Rear:	24.00 Type:8
	24.00 Type:2
Intersaction Rear:	1 Fwd: 1
36Safety Features Br. Rail:	2
Transition:	2
App. G. Rail:	1
App. Rail End:	2
53 Minimum Cl. Over:	99' 99 "
Under:	
*228 Minimum Vertical Cl	
Act. Odm Dir.:	99' 99"
Oppo. Dir:	99' 99"
Posted Odm. Dir:	00' 00"
Oppo. Dir:	00' 00"
55 Lateral Undercl. Rt:	H 10 10
56 Lateral Undercl. Lt:	4.50
*10 Max Min Vert Cl:	99' 99" Dir:0
39 Nav Vert Cl:	000 Horiz:0000
116 Nav Vert Cl Closed:	000
245 Deck Thickness Main	7.00
Deck Thick Approach:	0.00
246 Overlay Thickness:	0.00
212 Year Last Painted:	Sup:1997Sub:0000

65 Inventory Rating Mathod:	1
63 Operating Rating Method:	1
66 Inventory Type:	2 Rating: 20
64 Operating Type:	2 Rating: 20
231Calculated Loads:	
H-Modified:	21 0
HS-Modified:	26 0
Type 3:	26 0
Type 3s2:	28 0
Timber:	27 0
Piggyback:	00 0
261 H Inventory Rating:	18
262 H Operating Rating	30
67 Structural Evaluation:	4
58 Deck Condition:	6
59 Superstructure Condition:	7
* 227 Collision Damage:	1
60A Substructure Condition:	7
60B Scour Condition:	N
60C Underwater Condition	N
71 Waterway Adequacy:	N
61 Channel Protection Cond.:	N
68 Deck Geometry:	3
69 UnderClr. Horz/Vert:	5
72 Appr. Alignment:	8
62 Culvert:	N

Posting Data

70 Bridge Posting Required	5
41 Struct Open, Posted, CL:	A
* 103 Temporary Structure:	0
232 Posted Loads	
H-Modified:	00
HS-Modified:	00
Type 3:	00
Type 3s2:	00
Timber:	00
Piggyback	00
253 Notification Date:	02/01/1901
258 Fed Notify Date:	2/1/1901 12:00:00AM

File Location: CF Conversions/BIMS

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Processed Date:1/6/2010

Parameters: Bridge Serial Num

Bridge Inventory Data Listing

Structure ID:067-0097-0 **Cobb** **SUFF. RATING:** 76.00

Location & Geography

Structure ID:	067-0097-0
200 Brdge Information:	06
*6A Feature Int:	CSX RAILROAD (639140W)
*6B Critical Bridge:	0
*7A Route No Carried:	SR00407
*7B Facility Carried:	I-285
9 Location:	3.7 MI SE OF SMYRNA
2 Dot District:	7
207 Year Photo:	2009
*91 Inspection Frequency:	24 Date: 04/21/2009
92A Fract Crit Insp Freq:	0 Date: 02/01/1901
92B Underwater Insp Freq:	0 Date: 02/01/1901
92C Other Spc. Insp Freq:	0 Date: 02/01/1901
* 4 Place Code:	00000
*5 Inventory Route(O/U):	1
Type:	1
Designation:	1
Number:	00285
Direction:	0
*16 Latitude:	33 50.3645 HMMS Prefix:SR
*17 Longtitude:	84 -29.2377 HMMS Suffix:00 MP:16.24
98 Border Bridge:	000%Shared:00
99 ID Number:	000000000000000
*100 STRAHNET:	1
12 Base Highway Network:	1
13A LRS Inventory Route:	671040700
13B Sub Inventory Route:	1
101 parellel Structure:	N
*102 Direction of Traffic:	2
*264 Road Inventory Mile Post:	002.30
*208 Inspection Area:	7 Initials: EFP
Engineer's Initials:	sgm
* Location ID No:	067-00407D-016.24C

*104 Highway System:	1
*26 Functional Classification:	11
*204 Federal Route Type:	I No: 00028
105 Federal Lands Highway:	0
*110 Truck Route:	0
2006 School Bus Route:	0
217 Benchmark Elevation:	0000.00
218 Datum:	0
*19 Bypass Length:	05
*20 Toll:	3
*21 Maintanance:	01
*22 Owner:	01
*31 Design Load:	6
37 Historical Significance:	5
205 Congressional District:	06
27 Year Constructed:	1968
106 Year Reconsrtucted:	1983
33 Bridge Medium:	3
34 Skew:	25
35 Structure Flared:	0
38 Navigation Control:	N
213 Special Steel Design:	0
267 Type of Paint:	5
*42 Type of Service On:	1
Type of Service Under:	2
214 Movable Bridge:	0
203 Type Bridge:	E
259 Pile Encasement	3
*43 Structure Type Main:	3 02
45 No.Spans Main:	001
44 Structure Type Appr:	0 00
46 No Spans Appr:	0000
226 Bridge Curve Horz	0 Vert: 0
111 pier Protection	0
107 Deck Structure Type:	1
108 Wearing Structure Type:	1
Membrane Type:	0
Deck Protection:	0

Signs & Attachments

225 Expansion Joint Type:	15
242 Deck Drains:	0
243 Parapet Location:	0
Height:	4
Width:	3
238 Curb Height:	0
Curb Material:	0
239 Handrail	9 9
*240 Medium Barrier Rail:	1
241 Bridge Median Height:	0
* Bridge Median Width:	0
230 Guardrail Loc. Dir. Rear:	6
Fwrd:	6
Oppo. Dir. Rear:	6
Oppo. Fwrd:	6
244 Aproach Slab	3
224 Retaining Wall:	0
233Posted Speed Limit:	55
236 Warning Sign:	0.00
234 Delineator:	1.00
235 Hazzard Boards:	0
237 Utilities Gas:	00
Water:	00
Electric:	00
Telephone:	00
Sewer:	00
247 Lighting Street:	0
Navigation:	0
Aerial:	0
*248 County Continuity No.:	00

File Location: CF Conversions/BIMS

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Processed Date:1/6/2010

Parameters: Bridge Serial Num

Bridge Inventory Data Listing

Structure ID:067-0097-0

Programming Data

201 Project No:	ACIBFI-285-1 (205) CT.5
202 Plans Available:	4
249 Prop Proj No:	000000000000000000000000
250 Approval Status:	0000
251 PI Number:	0000000
252 Contract Date:	02/01/1901
260 Seismic No:	00000
75 Type Work:	00 0
94 Bridge Imp. Cost:	$0
95 Roadway Imp. Cost:	0
96 Total Imp Cost:	0
76 Imp Length:	000000
97 Imp Year:	0000
114Future ADT:	224085 Year:2027

Hydralic Data

215Waterway Data:	
High Water Elev:	0000.0 Year:1900
Flood Elev:	0000.0 Freq:00
Avg Streambed Elev:	0000.0
Drainage Area:	00000
Area of Opening:	000000
113 Scour Critical	N
216Water Depth:	00.0 Br.Height:00.0
222Slope Protection:	4
221Slope Protection	0 Fwd:0
219Fender System	0
220Dolphin:	0
223Current Cover:	000
Type:	0
No. Barrels:	0
* Width:	0.00 Height:0.00
* Length:	0 Apron:0
265 U/W Insp. Area	0 Diver:ZZZ
Location ID No:	067-00407D-016.24C

Measurements

*29ADT	149390 Year:2007
109%Trucks:	0
* 28 Lanes On:	10 Under:00
210 No. Tracks On:	00 Under:01
* 48 Max. Span Length	0134
* 49 Structure Length:	134
51 Br. Rwdy. Width	131.00
52 Deck Width:	134.30
* 47 Tot. Horiz. Cl:	68
50 Curb / Sidewalk Width	0.60 / 0.60
32 Approach Rdwy. Width	137
*229 Shoulder Width:	
Rear Lt:	6.50 Type:3 Rt:2.00
Fwd. Lt:	6.50 Type:3 Rt:2.00
Permanent Width:	
Rear:	60.00 Type:3
	60.00 Type:1
Intersection Rear:	0 Fwd: 1
36Safety Features Br. Rail:	1
Transition:	1
App. G. Rail:	1
App. Rail End:	1
53 Minimum Cl. Over:	99' 99 "
Under:	
*228 Minimum Vertical Cl	
Act. Odm Dir::	99' 99"
Oppo. Dir:	99' 99"
Posted Odm. Dir:	00' 00"
Oppo. Dir:	00' 00"
55 Lateral Undercl. Rt:	R 8 8
56 Lateral Undercl. Lt:	0.00
*10 Max Min Vert Cl:	99' 99" Dir:0
39 Nav Vert Cl:	000 Horiz:0000
116 Nav Vert Cl Closed:	000
245 Deck Thickness Main	7.00
Deck Thick Approach:	0.00
246 Overlay Thickness:	0.00
212 Year Last Painted:	Sup:2002Sub:0000

65 Inventory Rating Mathod:	1
63 Operating Rating Method:	1
66 Inventory Type:	2 Rating: 63
64 Operating Type:	2 Rating: 63
231Calculated Loads:	
H-Modified	21 0
HS-Modified:	30 0
Type 3:	33 0
Type 3s2:	40 0
Timber:	37 0
Piggyback:	40 0
261 H Inventory Rating:	37
262 H Operating Rating	62
67 Structural Evaluation:	7
58 Deck Condition:	7
59 Superstructure Condition:	7
* 227 Collision Damage:	0
60A Substructure Condition:	7
60B Scour Condition:	N
60C Underwater Condition	N
71 Waterway Adequacy:	N
61 Channel Protection Cond.:	N
68 Deck Geometry:	4
69 UnderClr. Horz/Vert:	4
72 Appr. Alignment:	8
62 Culvert:	N

Posting Data

70 Bridge Posting Required	5
41 Struct Open, Posted, CL:	A
* 103 Temporary Structure:	0
232 Posted Loads	
H-Modified:	00
HS-Modified:	00
Type 3:	00
Type 3s2:	00
Timber:	00
Piggyback	00
253 Notification Date:	02/01/1901
258 Fed Notify Date:	2/1/1901 12:00:00AM

File Location: CF Conversions/BIMS

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BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 067-0127-0 **Cobb** SUFF. RATING 70.77

Location & Geography

*		Structure I.D.No:	067-0127-0
	200	Bridge Information	06
*	6A	Feature Int:	I-285
*	6B	Critical Bridge:	0
*	7A	Route Number Carried:	CR01921
*	7B	Facility Carried:	ORCHARD ROAD
*	9	Location:	3 MI SE OF SMYRNA
	2	DOT District:	7
	207	Year Photo:	2009
*	91	Inspection Frequency:	24 Date: 07/22/2009
	92A	Fract Crit Insp Freq:	00 Date: 02/01/1901
	92B	Underwater Insp Freq:	00 Date: 02/01/1901
	92C	Other Spc. Insp Freq:	00 Date: 02/01/1901
*	4	Place Code:	00000
*	5	Inventory Route (O/U):	1
		Type:	4
		Designation:	1
		Number:	01921
		Direction:	0
*	16	Latitude:	33-51.3035 MMS Prefix: 00
*	17	Longitude:	84-29.0057 MMS Suffix: 000 MP: 0.00
	98	Border Bridge:	000 %Shared: 00
	99	ID Number:	000000000000000
*	100	STRAHNET:	0
	12	Base Highway Network:	1
	13A	LRS Inventory Route:	672192100
	13B	Sub Inventory Route:	0
*	101	Parallel Structure:	N
*	102	Direction of Traffic:	2
*	264	Road Inventory Mile Post:	000.75
*	208	Inspection Area:	09 Initials: JMC
		Engineer's Initial:	sgm

* Location I.D. No.: 067-01921X-000.75N

*	104	Highway System:	0
*	26	Functional Classification:	19
*	204	Federal Route Type:	0 No.: 00000
	105	Federal Lands Highway:	0
*	110	Truck Route:	0
	206	School Bus Route:	0
	217	Benchmark Elevation:	0000.00
	218	Datum:	0
*	19	Bypass Length:	03
*	20	Toll:	3
*	21	Maintenance:	01
*	22	Owner:	01
*	31	Design Load:	6
	37	Historical Significance:	5
	205	Congressional District:	05
	27	Year Constructed:	1968
	106	Year Reconstructed:	0000
	33	Bridge Median:	0
	34	Skew:	00
	35	Structure Flared:	0
	38	Navigation Control:	N
	213	Special Steel Design:	0
	267	Type of Paint:	5
*	42	Type of Service on:	5
		Under:	1
	214	Movable Bridge:	0
	203	Type Bridge:	Z-O-M-O
	259	Pile Encasement:	3
*	43	Structure Type Main:	3 02
	45	No. Spans Main:	004
	44	Structure Type Appr:	0 00
	46	No. Spans Appr:	0000
	226	Bridge Curve Horz:	0 Vert: 0
	111	Pier Protection:	0
	107	Deck Structure Type:	1
	108	Wearing Surface Type:	1
		Membrance:	0
		Protection:	0

Signs & Attachments

	225	Expansion Joint Type:	15
	242	Deck Drains:	3
	243	Parapet Location:	0
		Height:	0.00
		Width:	0.00
	238	Curb:	0.80 1
	239	Handrail:	7 7
*	240	Median Barrier Rail:	0
	241	Bridge Median Height:	0.00
		Width:	0.00
*	230	Guardrail Loc Dir Rear:	2
		Fwrd:	1
		Oppo Dir Rear:	0
		Fwrd:	0
	244	Approach Slab:	3
	224	Retaining Wall:	0
	233	Posted Speed Limit:	25
	236	Warning Sign:	0
	234	Delineator:	1
	235	Hazard Boards:	0
	237	Utilities Gas:	22
		Water:	21
		Electric:	00
		Telephone:	21
		Sewer:	00
	247	Lighting Street:	0
		Naviagtion:	0
		Aerial:	0
*	248	County Continuity No.:	00

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 067-0127-0 **Cobb** SUFF. RATING 70.77

Programming Data

201 Project No.: I-285-1 (55) 80 CT.4
202 Plans Available: 4
249 Prop. Proj. No. 0000000000000000
250 Approval Status: 0000
251 P.I. No.: 0000000
252 Contract Date: 02/01/1901
260 Seismic No.: 00000
75 Type Work: 00 0
94 Bridge Imp. Cost: $ 0
95 Roadway Imp. Cost: $ 0
96 Total Imp Cost: $ 0
76 Imp. Length: 000000
97 Imp. Year: 0000
114 Future ADT: 002340 Year: 2027

Hydraulic Data

215 Waterway Data
Highwater Elev.: 0000.0 Year: 1900
Avg. Streambed Elev.: 0000.0 Freq.: 00
Drainage Area: 00000
Area Of Opening: 000000
113 Scour Critical: N
216 Water Depth: 00.0 Br. Height: 00.0
222 Slope Protection: 4
221 Spur Dikes Rear: 0 Fwrd: 0
219 Fender System: 0
220 Dolphin: 0
223 Culvert Cover: 000
Type: 0
No. Barrels: 0
Width: 0.00 Height: 0.00
Length: 0 Apron: 0
* 265 U/W Insp. Area: 0 Diver: ZZZ

* Location I.D. No.: 067-01921X-000.75N

Measurements

* 29 ADT: 001560 Year: 2005
109 % Trucks: 4
* 28 Lanes On: 02 Under: 08
210 No. Tracks On: 00 Under: 00
* 48 Max. Span Length: 0073
* 49 Structure Length: 257
51 Br. Rwdy. Width: 28.30
52 Deck Width: 35.90
* 47 Tot. Horz. Cl: 28.30
50 Curb/Sdewlk Width: 5.00/1.50
32 Approach Rdwy Width: 028
* 229 Shoulder Width:
Rear Lt: 2.00 Type: 1 Rt: 2.00
Fwrd Lt: 2.00 Type: 1 Rt: 2.00
Pavement Width:
Rear: 24.00 Type: 2
Fwrd: 24.00 Type: 2
Intersection Rear: 1 Fwrd: 1
36 Safety Features Br. Rail: 2
Transition: 2
App. G. Rail: 1
App. Rail End: 2
53 Minimum Cl.Over: 99 ' 99 "
Under: H 16 ' 07 "
* 228 Min. Vertical Cl
Act. Odm Dir: 99 ' 99 "
Oppo. Dir: 99 ' 99 "
Posted Odm. Dir: 00 ' 00 "
Oppo. Dir: 00 ' 00 "
55 Lateral Undercl. Rt: H 10.50
56 Lateral Undercl. Lt: 4.60
* 10 Max Min Vert Cl: 99 ' 99 " Dir: 0
39 Nav Vert Cl: 000 Horz: 0000
116 Nav Vert Cl Closed: 000
245 Deck Thickness Main: 7.50
Deck Thick Approach: 0.00
246 Overlay Thickness: 0.00
212 Year Last Painted: Sup: 1995 Sub: 0000

Ratings

65 Inventory Rating Method: 1
63 Inventory Rating Method: 1
66 Inventory Type: 2 Rating: 20
64 Operating Type: 2 Rating: 34
231 Calculated Loads
H-Modified: 21 0
HS-Modified: 23 0
Type 3: 22 0
Type 3s2: 27 0
Timber: 25 0
Piggyback: 00 0
261 H Inventory Rating: 21
262 H Operating Rating: 35
67 Structural Evaluation: 5
58 Deck Condition: 7
59 Superstructure Condition: 6
* 227 Collision Damage: 1
60A Substructure Condition: 7
60B Scour Condition: N
60C Underwater Condition: N
71 Waterway Adequacy: N
61 Channel Protection Cond: N
68 Deck Geometry: 5
69 UnderClr. Horz/Vert: 6
72 Appr. Alignment: 8
62 Culvert: N

Posting Data

70 Bridge Posting Required: 5
41 Struct Open, Posted, Cl: A
* 103 Temporary Structure: 0
232 Posted Loads H-Modified: 00
HS-Modified: 00
Type 3: 00
Type3s2: 00
Timber: 00
Piggyback: 00
253 Notification Date 02/01/1901
253 Fed Notify Date: 02/01/1901 0

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 067-5220-0 **Cobb** SUFF. RATING 99.05

Location & Geography

*		Structure I.D.No:	067-5220-0
	200	Bridge Information	02
*	6A	Feature Int:	I-285
*	6B	Critical Bridge:	0
*	7A	Route Number Carried:	CR02835
*	7B	Facility Carried:	E/W CONNECTOR
*	9	Location:	3.2 MI SE OF SMYRNA
	2	DOT District:	7
	207	Year Photo:	2009
*	91	Inspection Frequency:	24 Date: 08/21/2009
	92A	Fract Crit Insp Freq:	00 Date: 02/01/1901
	92B	Underwater Insp Freq:	00 Date: 02/01/1901
	92C	Other Spc. Insp Freq:	00 Date: 02/01/1901
*	4	Place Code:	00000
*	5	Inventory Route (O/U):	1
		Type:	5
		Designation:	1
		Number:	02835
		Direction:	0
*	16	Latitude:	33-50.9323 MMS Prefix: 00
*	17	Longitude:	84-29.1462 MMS Suffix: 000 MP: 0.00
	98	Border Bridge:	000 %Shared: 00
	99	ID Number:	000000000000000
*	100	STRAHNET:	0
	12	Base Highway Network:	0
	13A	LRS Inventory Route:	0
	13B	Sub Inventory Route:	0
*	101	Parallel Structure:	N
*	102	Direction of Traffic:	2
*	264	Road Inventory Mile Post:	000.00
*	208	Inspection Area:	09 Initials: JMC
		Engineer's Initial:	sgm

*	104	Highway System:	0
*	26	Functional Classification:	14
*	204	Federal Route Type:	M No.: 09034
	105	Federal Lands Highway:	0
*	110	Truck Route:	0
	206	School Bus Route:	1
	217	Benchmark Elevation:	0000.00
	218	Datum:	0
*	19	Bypass Length:	04
*	20	Toll:	3
*	21	Maintenance:	01
*	22	Owner:	01
*	31	Design Load:	6
	37	Historical Significance:	5
	205	Congressional District:	06
	27	Year Constructed:	2001
	106	Year Reconstructed:	0000
	33	Bridge Median:	2
	34	Skew:	00
	35	Structure Flared:	1
	38	Navigation Control:	0
	213	Special Steel Design:	0
	267	Type of Paint:	0
*	42	Type of Service on:	5
		Under:	1
	214	Movable Bridge:	0
	203	Type Bridge:	Z-O-O-O
	259	Pile Encasement:	3
*	43	Structure Type Main:	5 02
	45	No. Spans Main:	004
	44	Structure Type Appr:	0 00
	46	No. Spans Appr:	0000
	226	Bridge Curve Horz:	0 Vert: 1
	111	Pier Protection:	0
	107	Deck Structure Type:	1
	108	Wearing Surface Type:	1
		Membrance:	8
		Protection:	1

Signs & Attachments

	225	Expansion Joint Type:	15
	242	Deck Drains:	0
	243	Parapet Location:	0
		Height:	0.00
		Width:	0.00
	238	Curb:	0.50 1
	239	Handrail:	1 1
*	240	Median Barrier Rail:	0
	241	Bridge Median Height:	0.50
		Width:	15.40
*	230	Guardrail Loc Dir Rear:	5
		Fwrd:	5
		Oppo Dir Rear:	5
		Fwrd:	5
	244	Approach Slab:	3
	224	Retaining Wall:	7
	233	Posted Speed Limit:	45
	236	Warning Sign:	0
	234	Delineator:	0
	235	Hazard Boards:	0
	237	Utilities Gas:	00
		Water:	21
		Electric:	22
		Telephone:	24
		Sewer:	00
	247	Lighting Street:	0
		Naviagtion:	0
		Aerial:	0
*	248	County Continuity No.:	00

* Location I.D. No.: 067-09034M-009.40E

BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 067-5220-0 **Cobb** SUFF. RATING 99.05

Programming Data

201 Project No.: UNKNOWN
202 Plans Available: 0
249 Prop. Proj. No. 0000000000000000
250 Approval Status: 0000
251 P.I. No.: 0000000
252 Contract Date: 02/01/1901
260 Seismic No.: 00000
75 Type Work: 00 0
94 Bridge Imp. Cost: $ 0
95 Roadway Imp. Cost: $ 0
96 Total Imp Cost: $ 0
76 Imp. Length: 000000
97 Imp. Year: 0000
114 Future ADT: 004725 Year: 2027

Hydraulic Data

215 Waterway Data
Highwater Elev.: 0000.0 Year: 0000
Avg. Streambed Elev.: 0000.0 Freq.: 000
Drainage Area: 00000
Area Of Opening: 000000
113 Scour Critical: N
216 Water Depth: 00.0 Br. Height: 00.0
222 Slope Protection: 4
221 Spur Dikes Rear: 0 Fwrd: 0
219 Fender System: 0
220 Dolphin: 0
223 Culvert Cover: 000
Type: 0
No. Barrels: 0
Width: 0.00 Height: 0.00
Length: 0 Apron: 0
* 265 U/W Insp. Area: 0 Diver: ZZZ

* Location I.D. No.: 067-09034M-009.40E

Measurements

* 29 ADT: 003150 Year: 2007
109 % Trucks: 3
* 28 Lanes On: 04 Under: 08
210 No. Tracks On: 00 Under: 00
* 48 Max. Span Length: 0095
* 49 Structure Length: 373
51 Br. Rwdy. Width: 67.00
52 Deck Width: 80.10
* 47 Tot. Horz. Cl: 67.00
50 Curb/Sdewlk Width: 5.10/5.10
32 Approach Rdwy Width: 052
* 229 Shoulder Width:
Rear Lt: 2.00 Type: 1 Rt: 2.00
Fwrd Lt: 2.00 Type: 1 Rt: 2.00
Pavement Width:
Rear: 22.00 Type: 2
Fwrd: 22.00 Type: 2
Intersection Rear: 0 Fwrd: 1
36 Safety Features Br. Rail: 1
Transition: 1
App. G. Rail: 1
App. Rail End: 1
53 Minimum Cl.Over: 99 ' 99 "
Under: H 23 ' 00 "
* 228 Min. Vertical Cl
Act. Odm Dir: 99 ' 99 "
Oppo. Dir: 99 ' 99 "
Posted Odm. Dir: 00 ' 00 "
Oppo. Dir: 00 ' 00 "
55 Lateral Undercl. Rt: H 25.00
56 Lateral Undercl. Lt: 4.20
* 10 Max Min Vert Cl: 99 ' 99 " Dir: 0
39 Nav Vert Cl: 000 Horz: 0000
116 Nav Vert Cl Closed: 000
245 Deck Thickness Main: 8.50
Deck Thick Approach: 0.00
246 Overlay Thickness: 0.00
212 Year Last Painted: Sup: 0000 Sub: 0000

Ratings

65 Inventory Rating Method: 2
63 Inventory Rating Method: 2
66 Inventory Type: 2 Rating: 36
64 Operating Type: 2 Rating: 51
231 Calculated Loads
H-Modified: 20 0
HS-Modified: 25 0
Type 3: 28 0
Type 3s2: 40 0
Timber: 36 0
Piggyback: 00 0
261 H Inventory Rating: 20
262 H Operating Rating: 28
67 Structural Evaluation: 8
58 Deck Condition: 8
59 Superstructure Condition: 8
* 227 Collision Damage: 0
60A Substructure Condition: 8
60B Scour Condition: N
60C Underwater Condition: N
71 Waterway Adequacy: N
61 Channel Protection Cond: N
68 Deck Geometry: 9
69 UnderClr. Horz/Vert: 9
72 Appr. Alignment: 8
62 Culvert: N

Posting Data

70 Bridge Posting Required: 5
41 Struct Open, Posted, Cl: A
* 103 Temporary Structure: 0
232 Posted Loads H-Modified: 00
HS-Modified: 00
Type 3: 00
Type3s2: 00
Timber: 00
Piggyback: 00
253 Notification Date 02/01/1901
253 Fed Notify Date: 02/01/1901 0

Attachment 9a

Project Framework Agreement

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 27, 2009

NOV 16

I285/ATLANTA RD

The Honorable Sam S. Olens
Commission Chairman
100 Cherokee Street
Suite 300
Marietta, Georgia 30090

Dear Mr. Olens:

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

PROJECT#: STP00-0222-01(001) Cobb County, P.I. #752300-

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 Albert Welch at (404)631-1690.

Sincerely,

Angela O. Whitworth

Angela O. Whitworth,
Financial Management Administrator

AOW: rm

Enclosure

c: Bob Rogers
Bryant Poole - District 7
Jeff Baker – Utilities

AGREEMENT

BETWEEN

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

AND

COBB COUNTY

FOR

TRANSPORTATION FACILITY IMPROVEMENTS

This Framework Agreement is made and entered into this 26th day of October, 2009, by and between the DEPARTMENT OF TRANSPORTATION, an agency of the State of Georgia, hereinafter called the "DEPARTMENT", and the **Cobb County,** acting by and through its Mayor and City Council or 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

Reference No. 9968
Scanned Date: _____

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 by following the procedures in the DEPARTMENT's Local Administered Project Manual contribute to the PROJECT by funding all or certain portions of the PROJECT costs for the preconstruction engineering (design) activities, hereinafter referred to as "PE", all reimburseable utility 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. PE expenditures incurred by the LOCAL GOVERNMENT after execution of this AGREEMENT shall be reimbursed by the DEPARTMENT once a written notice to proceed is given by the DEPARTMENT.

2. The DEPARTMENT shall contribute to the PROJECT by funding all or certain portions of the PROJECT costs for the PE, right of way acquisitions, reimbursable utility relocations, railroad costs, 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 cancellation 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 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 right of way or construction, 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 LOCAL GOVERNMENT shall accomplish the PE activities for the PROJECT. The PE activities shall be accomplished in accordance with the DEPARTMENT's Plan Development Process hereinafter referred to as "PDP", the applicable guidelines of the American Association of State Highway and Transportation Officials, hereinafter referred to as "AASHTO", the DEPARTMENT's Standard Specifications Construction of Transportation Systems, and all applicable design guidelines and policies of the DEPARTMENT to produce a cost effective PROJECT. Failure to follow the PDP and all applicable guidelines and policies will jeopardize the use of Federal Funds in some or all categories outlined in this agreement, and it shall be the responsibility of the LOCAL GOVERNMENT to make up the loss of that funding. The LOCAL GOVERNMENT's responsibility for PE activities shall include, but is not limited to the following items:

a. Prepare the PROJECT Concept Report and Design Data Book in accordance with the format used by the DEPARTMENT. The concept for the PROJECT shall be developed to accommodate the future traffic volumes as generated by the LOCAL GOVERNMENT as provided for in paragraph 7b and approved by the DEPARTMENT. The concept report shall be approved by the DEPARTMENT prior to the LOCAL GOVERNMENT beginning further development of the PROJECT plans. It is recognized by the parties that the approved concept may be updated or modified by the LOCAL GOVERNMENT as required by the DEPARTMENT and re-approved by the DEPARTMENT during the course of PE due to updated guidelines, public input, environmental requirements, Value Engineering recommendations,

Public Interest Determination (PID) for utilities, utility/railroad conflicts, or right of way considerations.

b. Prepare a Traffic Study for the PROJECT that includes Average Daily Traffic, hereinafter referred to as "ADT", volumes for the base year (year the PROJECT is expected to be open to traffic) and design year (base year plus 20 years) along with Design Hour Volumes, hereinafter referred to as "DHV", for the design year. DHV includes morning (AM) and evening (PM) peaks and other significant peak times. The Study shall show all through and turning movement volumes at intersections for the ADT and DHV volumes and shall indicate the percentage of trucks on the facility. The Study shall also include signal warrant evaluations for any additional proposed signals on the PROJECT.

c. Prepare environmental studies, documentation, reports and complete Environmental Document for the PROJECT along with all environmental re-evaluations required that show the PROJECT is in compliance with the provisions of the National Environmental Policy Act or the Georgia Environmental Policy Act as per the DEPARTMENT's Environmental Procedures Manual, as appropriate to the PROJECT funding. This shall include any and all archaeological, historical, ecological, air, noise, community involvement, environmental justice, flood plains, underground storage tanks, and hazardous waste site studies required. The completed Environmental Document approval shall occur prior to Right of Way funding authorization. A re-evaluation is required for any design change as described in Chapter 7 of the Environmental Procedures Manual. In addition, a re-

evaluation document approval shall occur prior to any Federal funding authorizations if the latest approved document is more than 6 months old. The LOCAL GOVERNMENT shall submit to the DEPARTMENT all studies, documents and reports for review and approval by the DEPARTMENT, the FHWA and other environmental resource agencies. The LOCAL GOVERNMENT shall provide Environmental staff to attend all PROJECT related meetings where Environmental issues are discussed. Meetings include, but are not limited to, concept, field plan reviews and value engineering studies.

d. Prepare all PROJECT public hearing and public information displays and conduct all required public hearings and public information meetings with appropriate staff in accordance with DEPARTMENT practice.

e. Perform all surveys, mapping, soil investigations and pavement evaluations needed for design of the PROJECT as per the appropriate DEPARTMENT Manual.

f. Perform all work required to obtain all applicable PROJECT permits, including, but not limited to, Cemetery, TVA and US Army Corps of Engineers permits, Stream Buffer Variances and Federal Emergency Management Agency (FEMA) approvals. The LOCAL GOVERNMENT shall provide all mitigation required for the project, including but not limited to permit related mitigation. All mitigation costs are considered PE costs. PROJECT permits and non-construction related mitigation must be obtained and completed 3 months prior to the scheduled let date. These efforts shall be coordinated with the DEPARTMENT.

g. Prepare the stormwater drainage design for the PROJECT and any required hydraulic studies for FEMA Floodways within the PROJECT limits. Acquire of all necessary permits associated with the Hydraulic Study or drainage design.

h. Prepare utility relocation plans for the PROJECT following the DEPARTMENT's policies and procedures for identification, coordination and conflict resolution of existing and proposed utility facilities on the PROJECT. These policies and procedures, in part, require the Local Government to submit all requests for existing, proposed, and relocated facilities to each utility owner within the project area. Copies of all such correspondence, including executed agreements for reimbursable utility/railroad relocations, shall be forwarded to the DEPARTMENT's Project Manager and the District Utilities Engineer and require that any conflicts with the PROJECT be resolved by the LOCAL GOVERNMENT. If it is determined that the PROJECT is located on an on-system route or is a DEPARTMENT LET PROJECT, the LOCAL GOVERNMENT and the District Utilities Engineer shall ensure that permit applications are approved for each utility company in conflict with the project. If it is determined through the DEPARTMENT's Project Manager and State Utilities Office during the concept or design phases the need to utilize Overhead/Subsurface Utility Engineering, hereinafter referred to as "SUE", to obtain the existing utilities, the LOCAL GOVERNMENT shall be responsible for acquiring those services. SUE costs are considered PE costs.

i. Prepare, in English units, Preliminary Construction plans, Right of Way plans and Final Construction plans that include the appropriate sections listed in the Plan Presentation Guide, hereinafter referred to as "PPG", for all phases of the PDP. All drafting and design work performed on the project shall be done utilizing Microstation and CAiCE software respectively using the DEPARTMENT's Electronic Data Guidelines. The LOCAL GOVERNMENT shall further be responsible for making all revisions to the final right of way plans and construction plans, as deemed necessary by the DEPARTMENT, for whatever reason, as needed to acquire the right of way and construct the PROJECT.

j. Prepare PROJECT cost estimates for construction, Right of Way and Utility/railroad relocation along with a Benefit Cost, hereinafter referred to as "B/C ratio" at the following project stages: Concept, Preliminary Field Plan Review, Right of Way plan approval (Right of Way cost only), Final Field Plan Review and Final Plan submission using the applicable method approved by the DEPARTMENT. The cost estimates and B/C ratio shall also be updated yearly if the noted project stages occur at a longer frequency. Failure of the LOCAL GOVERNMENT to provide timely and accurate cost estimates and B/C ratio may delay the PROJECT's implementation until additional funds can be identified for right of way or construction, as applicable.

k. Provide certification, by a Georgia Registered Professional Engineer, that the Design and Construction plans have been prepared under the guidance of the professional engineer and are in accordance with AASHTO and DEPARTMENT Design Policies.

l. Provide certification, by a Level II Certified Design Professional that the Erosion Control Plans have been prepared under the guidance of the certified professional in accordance with the current Georgia National Pollutant Discharge Elimination System.

m. Provide a written certification that all appropriate staff (employees and consultants) involved in the PROJECT have attended or are scheduled to attend the Department's PDP Training Course and Local Administered Project Training. The written certification shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.

8. The Primary Consultant firm or subconsultants hired by the LOCAL GOVERNMENT to provide services on the PROJECT shall be prequalified with the DEPARTMENT in the appropriate area-classes. The DEPARTMENT shall, on request, furnish the LOCAL GOVERNMENT with a list of prequalified consultant firms in the appropriate area-classes. The LOCAL GOVERNMENT shall comply with all applicable state and federal regulations for the procurement of design services and in accordance with the Brooks Architect-Engineers Act of 1972, better known as the Brooks Act, for any consultant hired to perform work on the PROJECT.

9. The DEPARTMENT shall review and has approval authority for all aspects of the PROJECT provided however this review and approval does not relieve the LOCAL GOVERNMENT of its responsibilities under the terms of this agreement. The DEPARTMENT will work with the FHWA to obtain all needed approvals as deemed necessary with information furnished by the LOCAL GOVERNMENT.

10. The LOCAL GOVERNMENT shall be responsible for the design of all bridge(s) and preparation of any required hydraulic and hydrological studies within the limits of this PROJECT in accordance with the DEPARTMENT's policies and guidelines. The LOCAL GOVERNMENT shall perform all necessary survey efforts in order to complete the hydraulic and hydrological studies and the design of the bridge(s). The final bridge plans shall be incorporated into this PROJECT as a part of this Agreement.

11. 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.

12. 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.

13. The LOCAL GOVERNMENT shall be responsible for acquiring a Value Engineering Consultant for the DEPARTMENT to conduct a Value Engineering Study if the total estimated PROJECT cost is $10 million or more. The Value Engineering Study cost is considered a PE cost. The LOCAL GOVERNMENT shall provide project related design data and plans to be evaluated in the study along with appropriate staff to present and answer questions about the PROJECT to the study team. The LOCAL GOVERNMENT shall provide responses to the study recommendations indicating whether they will be implemented or not. If not, a valid response for not implementing shall be provided. Total project costs include PE, right of way, and construction, reimbursable utility/railroad costs.

14. 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.

15. 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 following items have been completed and submitted by the LOCAL GOVERNMENT:

a. Submittal of acceptable PROJECT PE activity deliverables noted in this agreement.

b. Certification that all needed rights of way have been obtained and cleared of obstructions.

c. Certification that the environmental document is current and all needed permits and mitigation for the PROJECT have been obtained.

d. Certification that all Utility/Railroad facilities, existing and proposed, within the PROJECT limits are shown, any conflicts have been resolved and reimbursable agreements, if applicable, are executed.

If the LOCAL GOVERNMENT is shown to LET the construction in Attachment "A", the LOCAL GOVERNMENT shall provide the above deliverables and certifications and shall follow the requirements stated in Chapter 10 of the DEPARTMENT"s Local Administered Project Manual.

16. The LOCAL GOVERNMENT shall provide a review and recommendation by the engineer of record concerning all shop drawings prior to the DEPARTMENT review and approval. The DEPARTMENT shall have final authority concerning all shop drawings.

17. The LOCAL GOVERNMENT agrees that all reports, plans, drawings, studies, specifications, 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 the PROJECT is being let by the DEPARTMENT. 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.

18. The LOCAL GOVERNMENT shall be responsible for the professional quality, technical accuracy, and the coordination of all reports, designs, drawings, specifications, and other services furnished by or on behalf of the LOCAL GOVERNMENT pursuant to this Agreement. The LOCAL GOVERNMENT shall correct or revise, or cause to be corrected or revised, any errors or deficiencies in the reports, designs, drawings, specifications, and other services furnished for this PROJECT. Failure by the LOCAL GOVERNMENT to address the errors or deficiencies within 30 days of notification shall cause the LOCAL GOVERNMENT to assume all responsibility for construction delays caused by the errors and deficiencies. All revisions shall be coordinated with the DEPARTMENT prior to issuance. The LOCAL GOVERNMENT shall also be responsible for any claim, damage, loss or expense, to the extent allowed by law that is attributable to errors, omissions, or negligent acts related to the designs, drawings, specifications, and other services furnished by or on behalf of the LOCAL GOVERNMENT pursuant to this Agreement.

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 — Asst.

LOCAL GOVERNMENT NAME

BY: _____
Name Samuel S. Olens
Title Chairman, Cobb County Board of Commissioners

Signed, sealed and delivered this 3rd day of September, 2009, in the presence of:

_____
Witness

_____
Notary Public

LORI PRESNELL NOTARY PUBLIC GEORGIA COBB COUNTY EXPIRES NOV. 12, 2011

This Agreement approved by Local Government, the 11 day of August, 2009.

Attest

_____
Name and Title
Candace W. Ellison
County Clerk

FEIN: 58-6000804

APPROVED PER MINUTES OF COBB COUNTY BOARD OF COMMISSIONERS 8/11/09

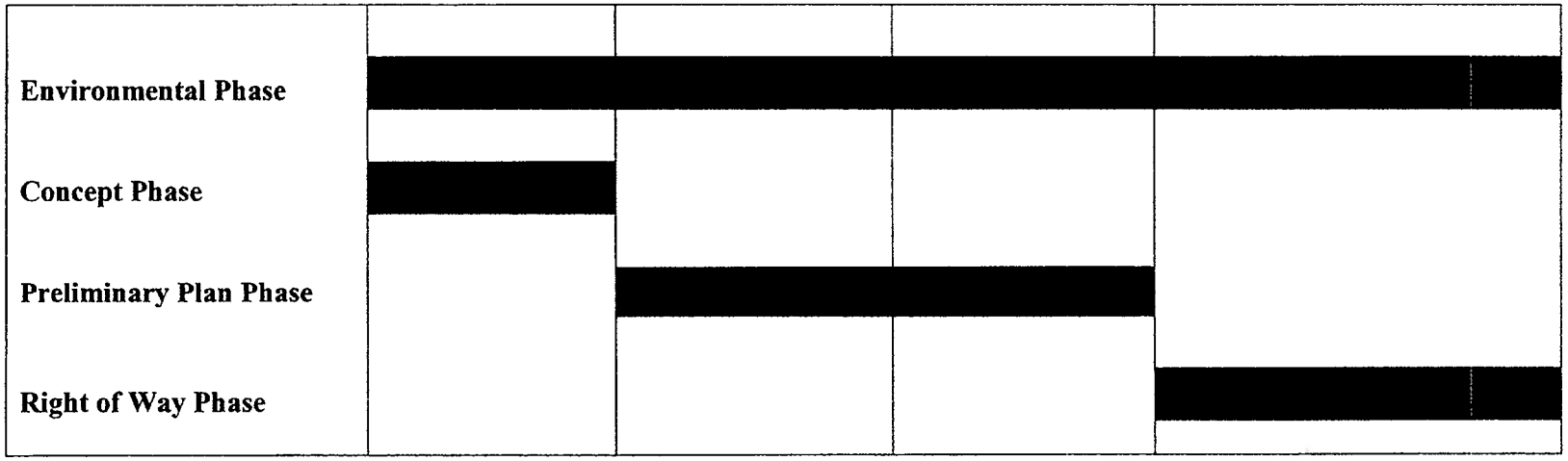
ATTACHMENT "A"
Project Number: STP00-0222-01(001) – Cobb County

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# 752300 STP00-0222-01(001) I-285 @ CR4519/ Atlanta Road	(100%) LCL GOV	Local Gov.	(100%) LCL GOV	Local Gov.	Local Gov.	(80%) Federal ($16,020,000) **EARMARK** (20%) LCL GOV ($6,203,000) >($22,223,000) 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"
752300 – Cobb County

Proposed Project Schedule



Deadlines for Responsible Parties	**Execute Agreement**	**Month/Year** (Approve Concept)	**Month/Year** (Approve Env. Document)	**Month/Year** (Authorize Right of Way funds)	**Month/Year** (Authorize Const. funds)
Annual Reporting Requirements		**July 2009**	**October 2009**	**December 2009**	**February 2011**

The Local Government shall provide a written status report to the Department's Project Manager with the actual phase completion date(s) and the percent complete/proposed completion date of incomplete phases. The written status report shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.

Attachment 9b

Letter from Todd Long

CC: David J
Bob G
Dennis U

Vance C. Smith, Jr., Commissioner

GEORGIA DEPARTMENT OF TRANSPORTATION

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

RECEIVED
SEP 14 2009
By JB CDOT

September 9, 2009

STP00-0222-01(001), Cobb County
I-285 at Atlanta Road Interchange Reconstruction
P.I. No. 752300

Mr. David Montanye, Director
Cobb County Transportation Division
1890 County Services Pkwy
Marietta, GA 30008

Dear Mr. Montanye:

This letter is to document the discussion and commitment made at a meeting held on September 3, 2009 in my office.

During the concept phase of the Atlanta Road project, two build alternatives were determined to meet the Need and Purpose. One alternative was a partial cloverleaf (Alternate # 2) and the second was a compressed diamond (Alternate # 4). Both alternatives provided acceptable (improved) levels of service and improved safety and operations on Atlanta Road and on I-285 meeting the core Need and Purpose of the project.

At that point, it was determined that the two alternatives would move forward in the Plan Development Process with alternate # 2 being the locally preferred alternative. Moving the two projects forward would allow for the NEPA process and Value Engineering (VE) to better determine the final alternative.

During the preliminary NEPA process it was determined that there would be at least two additional displacements caused by Alt. 2. The VE study provided numerous cost saving recommendations to both alternatives in addition to comparing the two alternates against each other. It was determined that Alt. 2 would cost an estimated $4 million more than Alt. 4 for construction alone while providing equivalent improvements in safety, operations and level of service.

With this information in hand, it was determined that Alternate #2 would be eliminated and Alternate # 4 would become the preferred alternate and continue through the NEPA process. The Department is thereby committing to fund the construction costs of the most cost effective alternative. At this time, Alternate # 4 appears to be the most cost effective alternate. The County will remain responsible for all preliminary engineering, right of way acquisition and reimbursable utility relocation costs for the project to complete the PDP process allowing the Department to fund and construct the project using federal and state monies.

The Department looks forward to the continued partnership with Cobb County and completing this and other important roadway projects in the County. If there are any questions or need for clarification on this issue, please give me a call at 404-631-1021.

Sincerely,

Todd I. Long, PE, PTOE
Director of Planning

TIL:DMR
C: Angela Whitfield, OFM
Ben Buchan, Urban Design

Attachment 9c

Meeting Minutes, 4-23-07

I-285 and Atlanta Road Interchange Improvements
STP-222-1(1), Cobb County
PI 752300

April 23, 2007
Meeting Notes

Location: 10am, GDOT Office of Environment/Location, Back Conference Room

Attendees:

- Heather Mustonen, GDOT
- Lauren Thompson, GDOT
- David Jackson, Cobb DOT
- Mandy Elliott, Cobb Co. Historic Preservation
- Martha Teal, EPEI
- David Adair, EPEI
- Jennifer Giersch, FHWA
- Garrett Silliman, EPEI
- Wendy Dyson, PBS&J
- Scott Dubord, PBS&J
- Emmanuella Myrthil, GDOT
- Barry Brown, GDEcD

Notes:

- Introductions were made and David Jackson provided the group with information on the project. The Atlanta Road/285 interchange is an original 285 interchange and will be replaced to accommodate 21 lanes for the eventual 285 expansion.
- Garrett Silliman provided the group with an overview of the Civil War resource identified during survey for the project. The resource is an earthwork that served as a shadow fortification, put up in opposition to Johnson's River Line. He indicated that the resource boundary extends from the I-285 ROW boundary to the Beech Haven Trail ROW boundary. Civil War artifacts were recovered from the Beech Haven trail side of the property during work done by EPEI for a Cobb County project. Garrett indicated that due to the presence of artifacts on either side of the parcel and its relatively undisturbed nature, the entire parcel is considered as the resource boundary.
- Garrett Silliman also indicated that the design had been changed after identification of the resource in order to remove any direct effects of the project. Boundary issues were also resolved and the current resource boundary is correct and will not need revision as previously thought.
- Jennifer Giersch inquired about the need and purpose for the project.

- Scott Dubord indicated that the project consisted of operational improvements to the interchange, allowing for better flow of traffic across the bridge on Atlanta Road and for those entering and exiting I-285.
- David Jackson provided background on the project history dating back to the 1990's. The original project design involved flyovers and has been greatly reduced in scale to the current proposed plans. He indicated that this project is the last missing element in a combination of projects to connect Atlanta Road to the city of Atlanta as well as to I-285 and other highways. He indicated that this project is a critical/key element to transportation in the area.
- David Jackson also indicated that he has had contact with the apartment complex located on the south side of the parcel containing the resource. They expressed their intention to purchase the parcel containing the resource and include it in the redevelopment of their land.
- Jennifer Giersch asked about direct impacts and asked that a discussion of all avoidance measures be included.
- David Jackson indicated that the property is positioned well along Beech Haven trail as it provides good access to Atlanta Road and other points of interest in the area.
- Jennifer Giersch inquired about zoning.
- David Jackson indicated that it could be zoned for high density; a tower might even be possible. There is a mixed use development across the street and the parcel is positioned quite well for development.
- Jennifer Giersch asked if the resource is worthy of preservation in place.
- Garrett Silliman indicated that he believed that it was. He stated that it is well preserved and one of the last remaining trenches in the area. While he only identified material on two ends of the parcel he feels that it is highly likely that more material exists on the remainder of the parcel due to its relatively untouched state. He indicated that the resource is well preserved as well as well documented by Civil War records.
- Jennifer Giersch agreed that indirect and cumulative impacts are an issue because there is not much left in the area. She inquired about mitigation/minimization efforts.
- Lauren Thompson presented ideas for mitigation that had been discussed previously including: complete archaeological documentation of the resource combined with a historical narrative, medium format photography, and a management document that would aim to inventory Civil War resources in Metro Atlanta and offer suggestions on how to best preserve/manage such resources.
- David Jackson brought up Discovery Boulevard and the County's purchase of land containing a shoupade as a way that preservation has occurred previously.
- Barry Brown indicated that he is currently working on a document that identifies Civil War resources in Georgia. He indicated that he will be visiting the Cobb Co. resource in the near future and will photograph it and place it on the Georgia Civil War Commission website.
- Mandy Elliott indicated that Cobb County does not have a document dedicated to the Johnson River Line.

- Wendy Dyson mentioned a conservation group in Mableton that is developing a master plan for the management of the River Line in Mableton. She indicated she would provide Heather Mustonen with contact information for the group.
- David Jackson discussed the March to the Sea bike trail that Cobb County is currently developing that would include a section along Beech Haven trail and directly past the resource. He mentioned that it would be a good place for a passive park, with the bike trail and housing development across the street but indicated that there may not be funds available for that.
- Wendy Dyson stated that the bike path going past the resource on Beech Haven Trail would make it a good place for signage.
- Lauren Thompson indicated that bringing people close to the resource may increase danger to the resource.
- Mandy Elliott stated that review by her office would be required for rezoning of the parcel prior to any development. She indicated that a requirement for rezoning could be protection of the trench and the placement of a buffer around it. In addition, site plan reviews are required by the county for any parcel undergoing development, whether or not it is being rezoned, in order to obtain a land disturbance permit. Site plans are reviewed and comments are made which can include a request to preserve an historic or archaeological resource. She also indicated that her recommendations for preservation have to be approved by the Historic Preservation Board and the County Board of Commissioners. The Board is generally sympathetic to resources but approval is not guaranteed.
- Lauren Thompson stated that a mitigation stipulation could be that Cobb County agrees to review all rezoning efforts for the parcel.
- Garrett Silliman asked whether mitigation would occur for archaeology beyond the trench.
- Heather Mustonen indicated that a mitigation measure would be archaeological documentation of the entire parcel. This is contingent on landowner permission to perform work on the land. She indicated she had contacted the landowner in October but has had no luck reaching her since their initial conversation. She will attempt to contact the landowner again.
- Heather Mustonen suggested that if landowner permission is not granted then perhaps Cobb County could require archaeological documentation as part of rezoning.
- Barry Brown indicated that zoning was a very effective method in preservation.
- Jennifer Giersch inquired about noise studies.
- David Jackson indicated that there are very active homeowners in the area and a passive park could be well received although there are issues with funding such a park.
- Barry Brown stated that if the County has money that they should hire Roberta Cook. He stated that she was very good at getting such projects through.
- David Jackson stated that it is very important that this project get through rather quickly. It is the focus of Cobb DOT to deliver the interchange project and any park/mitigation work should be done as a parallel effort to minimize the timeline.
- Scott Dubord indicated that he is supposed to turn in preliminary plans in by May.
- Jennifer Giersch asked if there was a schedule for the proposed I-285 widening project. It was stated that there is not.

- Wendy Dyson and Jennifer Giersch discussed the writing of the CE. It will include a full blown discussion of ICI although this is not usually included in a CE.
- Barry Brown inquired about the resource's relationship to the Johnson River Line.
- Garrett Silliman indicated that it was a forward skirmish line directly related to the Johnson line and indicated the area on a map from the Civil War atlas.
- Barry Brown stated that he would like to be a consulting party on the project. He also stated that the Georgia Civil War Commission has shifted its emphasis to tourism and away from preservation since being moved from the SHPO office to the Department of Economic Development.
- Jennifer Giersch raised the possibility of early acquisition of the property in anticipation of the 285 widening project. It was discussed that this may not be an option as there is currently no date associated with that project.
- Jennifer Giersch indicated that the 285 widening project and its potential to destroy the resource in the future should be taken into consideration when discussing mitigation.
- David Adair expressed his concerns over open ended mitigation measures. Mitigation that may not be fulfilled because of the indefinite nature of things.
- Jennifer Giersch stated that the MOA could be prescriptive and state when such things need to be accomplished etc. An end date may not be possible but a scope of services could be included in the environmental commitments of the NEPA document.
- David Adair raised the issue of the streams located on the parcel and the fact that these may lessen the amount of parcel that is developable.
- David Jackson indicated that the County requires 50ft, up to 100ft, of buffer for streams.
- Wendy Dyson indicated that any development requiring a 404 permit from the Army Corps would also require Section 106 review.
- Project Schedule was discussed. Scott Dubord indicated that the project is currently scheduled for a 2008 ROW and a 2010 Let date.
- Discussion after the meeting brought up the possibility of placing the resource on the Cobb County Register of Historic Places and the help this would provide with future development. It was suggested that this be included as a mitigation measure.

<u>Action Items</u>

- PBS&J and EPEI will provide anticipated dates for submission of the draft AOE and NEPA document so that a realistic timeline can be established and to determine any necessary schedule revisions.
- GDOT will contact the Landowner regarding access to the land for mitigation.
- GDOT will contact the Mableton River Line Historic Area Committee regarding their master plan and conservation efforts.
- GDOT will schedule a technical assistance meeting with SHPO.
- EPEI will work on a draft of the AOE to be submitted to GDOT for review.
- PBS&J will work on the CE and submit to GDOT for review.

Attachment 9d

Meeting Minutes, 4-2-08

Post, Buckley, Schuh & Jernigan, Inc.
Transportation Design
5665 New Northside Drive N.W., Suite 400
Atlanta, Georgia 30328
Phone 770/933-0280 Fax 770/933-1920

MEETING MINUTES

TO: *Attendees*

FROM: *Scott M. Dubord*

CC: *06-2769 File*
Cobb County DOT

SUBJ: ***I-285 West @ Atlanta Road Interchange***
STP00-0222-01(001), PI 752300
Discussion of Concept report & IMR Comments

DATE: *April 3, 2008*

A meeting for the I-285 West @ Atlanta Rd Interchange project in Cobb County was held on April 2, 2008 at 1:00 PM in the Urban Design Conference Room 352A the Georgia Department of Transportation offices at Two Capitol Square. The following is a list of attendees:

Denny Meier	**PBS&J**	**Marcela Coll**	**GDOT-Urban**
Ron Morris	**PBS&J**	**Darrell Richardson**	**GDOT-Urban**
Scott Dubord	**PBS&J**	**Roxana Ene**	**GDOT-Planning**
Jim Evans	**PBS&J**	**Ulysses Mitchell**	**GDOT-Planning**
Butch Welch	**GDOT - Urban**		

The meeting was held to discuss the GDOT comments on the Traffic, IMR & Concept Report package for the Atlanta Rd/I-285 Interchange that was submitted in early December 2007 to Urban Design. PBS&J is the consultant hired by Cobb County.

The following items were discussed:

Traffic

- GDOT-Location comments were provided to the project team prior to the meeting regarding the traffic data contained in the IMR & Concept Report. Urban design asked that PBS&J provide raw traffic data (2005) and all supporting data used to develop the traffic projections. Urban noted that PBS&J could contact the reviewer (Shelley Nweke) directly for further direction PBS&J noted the following:
    - The traffic counts and truck percentages came directly from the I-285 Strategic Implementation plan (2005)

- The I-285 volumes shown in the reports are constrained volumes (2200 veh/hr-lane) since there are no plans currently in the RTP to add SOV or HOV capacity to I-285. GDOT-planning to confirm this.
- The peak hour factor used in the analysis is low on the interstate ramps due to the overall length of the peak period. The actual period where the ramps operate at full capacity extends beyond one peak hour.

IMR

- PBS&J noted that the Need & Purpose from the Categorical Exclusion (CE) document was not ready for use when the IMR was submitted for review.
- The Need & Purpose description needs to reflect the separate utility of the Atlanta Rd/I-285 Interchange rather than the interchange as an element of the old East West Connector Phase V project. This also needs to be properly reflected in the CE. The Need & Purpose needs to be written to reflect the deficiencies that the project will correct and not describe the project elements. General comments on typical elements included in the Need & Purpose statement:
  - Background/history of the project
  - Logical termini
  - Traffic and LOS data to help support deficiency claims
  - Crash data analysis/safety concerns – data should be accumulated and analyzed roughly ½ mile in all directions from the project limits to get a complete picture of the area's safety issues.
  - Resolve milepost discrepancies
  - Discuss land use or land use changes, if possible
  - Discuss EJ or any other environmentally sensitive issues (e.g. The public's request for noise barriers)
- According to GDOT-Planning, the IMR document needs to be more technical and less narrative and should be structured in a more reader-friendly manner
- The 8 Federal requirements of the IMR need to be discussed in detail in the document and supported with technical data. Crash data and "other alternatives investigated" should also be discussed
- It was suggested that if there is a specific section within the document entitled "Existing Conditions", then there should be subsequent sections entitled "Future Conditions" and/or "Description of the Proposed Project"
- It was brought to GDOT's attention that the Concept Report and IMR were prepared with the understanding that the IMR would be submitted as a technical attachment to the Concept Report. This is how PBS&J had been directed. Because of this understanding, a lot of the project design details called for by GDOT-Planning to be included in the IMR were not present because that information is included in the Concept Report. The State proposed two possible solutions:
  1. Keep the two documents as-is, with the IMR as an attachment to the Concept Report. However, it is understood that the State will not submit the IMR to FHWA until the Concept report is approved by GDOT.
  2. Revise the IMR to included design elements, so that the document can be submitted to FHWA as a stand-alone report. This option also presents risks (i.e. what if the

IMR is approved by FHWA, but the State requires changes to the Concept Report that the IMR was based on?)

Option 2 (stand-alone IMR, with concept report info included and a separate Concept Report) was the solution recommended by the project team, but ultimately the County can direct PBS&J to handle it either way.

- Also, the approval of the IMR is contingent on the CE approval.

Concept Report

- Bike lane issue – verbiage should be included in the report stating why we aren't including the bike lane in this project and what the alternative plan might be. The County still needs to submit this change or new bike route proposal thru ARC.
- R/W and required limit of access cost estimate prepared by GDOT needs to be included in the Concept Report cost estimate. The overall project cost will exceed $25M, therefore a VE study will need to be conducted and coordinated with Cobb County. The project team agreed that this study needs to be conducted ASAP.
- Concept Report mark-ups were provided to PBS&J from Urban Design. In particular, PBS&J should show specific justification data in the "Alternatives considered" section of the document

Action Items:

- *PBS&J to submit raw traffic data to GDOT*
- *GDOT to send PBS&J final R/W and L/A cost estimates prepared by R/W office in late 2007.*
- *PBS&J to revise IMR and resubmit with 2-3 weeks after the traffic is approved by GDOT-Location. Concept Report will be resubmitted prior to IMR submittal.*
- *Discuss VE with Cobb County and schedule*

This document represents Post, Buckley, Schuh, & Jernigan, Inc.'s interpretation of the meeting. Please contact the project manager if you have any questions.

Sincerely,

Scott M. Dubord, P.E.
Project Manager

Attachment 9e

Memorandum of Agreement letter

Vance C. Smith, Jr., Commissioner

GEORGIA DEPARTMENT OF TRANSPORTATION

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

August 26, 2009

Mr. Samuel S. Olens, Chairman
Cobb County Board of Commissioners
100 Cherokee Street
Marietta, GA 30090
Attn: David Jackson, P.E. Cobb Co. DOT

Subject: GDOT Project STP-222-1(1), Cobb County, P.I. #752300, HP #070726-007; Section 106 Compliance Memorandum of Agreement, Scope of Services, and Consultant Proposal

Dear Mr. Olens,

Project STP-222-1(1), Cobb County consists of the proposed interchange improvement at I-285 and South Atlanta Road. During the course of environmental surveys two eligible historic properties were identified within the project's area of potential effect: the Forward Skirmish Line/Archaeological Site 9CO707 associated with the Battle of Atlanta and the Atlanta and Birmingham Air Line Railway. In compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, archaeology and history survey reports, as well as an Assessment of Effects document, were prepared and submitted to the Federal Highway Administration (FHWA), the Georgia State Historic Preservation Officer (SHPO), and all other consulting parties for review and comment. It was determined that the project would have an adverse effect to the Forward Skirmish Line/Archaeological Site 9CO707 and no adverse effect to the Atlanta and Birmingham Air Line Railway. The SHPO concurred with this determination in a letter dated September 30, 2008, enclosed for your review.

Enclosed is the proposed Memorandum of Agreement (MOA) to resolve adverse effects to the Forward Skirmish Line/Archaeological Site 9CO707. The MOA was previously transmitted to the Cobb County Department of Transportation (DOT) on February 20, 2009 and has since been revised to include Cobb County as a signatory in place of the Cobb County DOT. In accordance with the attached Project Framework Agreement between the Cobb County Department of Transportation and the Georgia Department of Transportation for project STP-222-1(1), it is the responsibility of Cobb County to pay for all preliminary engineering costs, which includes the proposed mitigation to resolve adverse effects to environmental resources as a result of the project. Per our conversation with project manager David Jackson, the Department will oversee the development and completion of the mitigation stipulation as described in the MOA. Also enclosed is a scope of services used to solicit cost estimates for completion of the study, along with a proposal for this work prepared by Edwards-Pitman Environmental, Inc. for PBS&J.

Please review the enclosed documentation. If you are in agreement with the stipulation of the MOA, please sign it at this time and return it to the Department's Office of Environment and Location for further processing and distribution. If additional information is required, please contact Heather Mustonen (404-699-6881 or hmustonen@dot.ga.gov) or Chad Carlson (404-505-4489 or ccarlson@dot.ga.gov) of the Office of Environment and Location. We appreciate your assistance in this matter.

Sincerely,

Glenn Bowman, P.E.

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

GSB/HLM
Enclosures
Cc: Rodney Barry, P.E., FHWA
(Attn: Jennifer Giersch)
Wendy Dyson, PBS&J
Butch Welch, GDOT
Chad Carlson, GDOT
Larry Bowman, GDOT
Atlanta Regional Commission

Attachment 9f

Meeting Minutes, 3-22-10

PBS&J

Post, Buckley, Schuh & Jernigan, Inc.
Transportation Design
1600 RiverEdge Pkwy N.W., Suite 600
Atlanta, Georgia 30328
Phone 770/933-0280 Fax 770/933-1920

MEETING MINUTES

TO: *Attendees*

FROM: *Scott M. Dubord*

CC: *06-2769 File*
Bryan Ricks, CCDOT

SUBJ: ***I-285 @ CR4519/Atlanta Road Interchange***
STP00-0222-01(001), PI 752300
Discussion of PFA and Project Schedule

DATE: *May 6, 2010*

A meeting for the I-285 @ CR 4519/Atlanta Rd Interchange project in Cobb County was held on March 22, 2010 at 10:00 AM in Conference Room D at the Cobb County Department of Transportation offices at 1890 County Services Parkway in Marietta. The following is a list of attendees:

Ron Morris	**PBS&J**	**Chandria Brown**	**GDOT-OPD**
Scott Dubord	**PBS&J**	**Faye Dimassimo**	**Cobb DOT**
Wendy Dyson	**PBS&J**	**Bob Galante**	**Cobb DOT**
Ben Buchan	**GDOT-Design**	**David Jackson**	**Cobb DOT**
Butch Welch	**GDOT-Rdwy**	**Mike Cates**	**Cobb DOT/SPLOST**
Marcela Coll	**GDOT-Rdwy**	**Dan McDuff**	**Cobb DOT/SPLOST**
Darrell Richardson	**GDOT-Rdwy**	**Larry Bowman**	**GDOT-OE**
Stanley Hill	**GDOT-OPD**		

The meeting was held to discuss the project schedule and the status of the Project Framework Agreement (PFA) between GDOT & CCDOT as it relates to the I-285@CR4519/Atlanta Road Interchange project. PBS&J is the consultant hired by Cobb County.

The following items were discussed:

PFA

- Cobb County is responsible for the PE and right-of-way costs. GDOT is responsible for the Construction costs. GDOT will verify with their Utility office how utility relocations within Interstate R/W will be addressed. A revised utility cost estimate, currently estimated at $500k, needs to be provided by Cobb DOT/PBS&J. Impacts to the Colonial and Plantation

Pipelines should be mitigated by the change to the Tight Urban Diamond interchange configuration; however the existing lines may need to be encased due to additional fills.

- Local Government certification is still pending and will need to be complete prior to the completion of the PFA addendum. The current PFA is dated 10/09.

Project Controls and schedule

- All project correspondence from GDOT will be to the CCDOT project manager. All submittals to GDOT must be routed through CCDOT for review and approval. Carbon copy Faye Dimassimo (CCDOT) and Stanley Hill (GDOT) on all future project correspondence. Chandria Brown is the new project manager assigned by GDOT's Office of Program Delivery.
- The Concept Report package, revised to reflect the Tight Urban Diamond interchange configuration recommended after the VE study, was submitted to GDOT on January 22, 2010. The IMR submittal was held pending approval of the traffic by the Office of Planning. The traffic was submitted for final approval from the Office of Planning on March 15. The Concept Report, IMR and CE will need to be revised based on the approved traffic. All data that appears in each of these documents must be consistent throughout. FHWA has previously reviewed both the IMR and Concept Report (November 2009, with comments), but has assigned a new reviewer (Melinda Roberson) to the project.
- GDOT voiced concern regarding the schedule (dated Dec 2009) given the pending conceptual, environmental and public involvement tasks. A revised schedule was presented at the meeting by PBS&J, with a late September CE approval date, an early November 2010 PFPR date and a late January 2011 R/W approval date. The R/W plan preparation task was condensed to allow for the expanded time for concept and environmental approval. The early r/w acquisition task will be removed, as the Pilot truck stop would not be considered a "hardship" or a protective buy. Cobb DOT noted that review time should be added for CCDOT QA/QC for all submittals. PBS&J will work to get the CE approved prior to September, but voiced concern over the need for an Affected Property Owner Meeting and/or a detour meeting prior to the approval of the CE by FHWA. GDOT-OE requires that these meetings be requested by the GDOT PM directly. GDOT to investigate the validity of these concerns. PBS&J to submit a revised schedule to CCDOT ASAP. CCDOT to review and distribute final schedule to GDOT. GDOT will do their best to expedite internal review times, but noted that FHWA will not be flexible on 1st submittal reviews.

Concept Report

- A 4' bike lane will be included along Atlanta Road through the interchange at I-285. The alternate project/bike route discussed in previous versions of the Concept report (prior to Jan. 2010) is no longer valid.
- GDOT noted that it is essential that the TIP matches the current concept layout and traffic information.
- The Pilot truckstop is the only displacement along the corridor with the TUDI alternate. All documents, including the conceptual stage study and cost estimates should be revised accordingly.

Action Items:

- *PBS&J to submit revised project schedule to CCDOT for review, approval and distribution*
- *CCDOT to complete local government certification process; finalize PFA*
- *GDOT to check on the need for an Affected Prop Owner meeting and/or Detour Meeting prior to CE approval.*
- *GDOT will verify with their Utility office how utility relocations within Interstate R/W will be addressed*

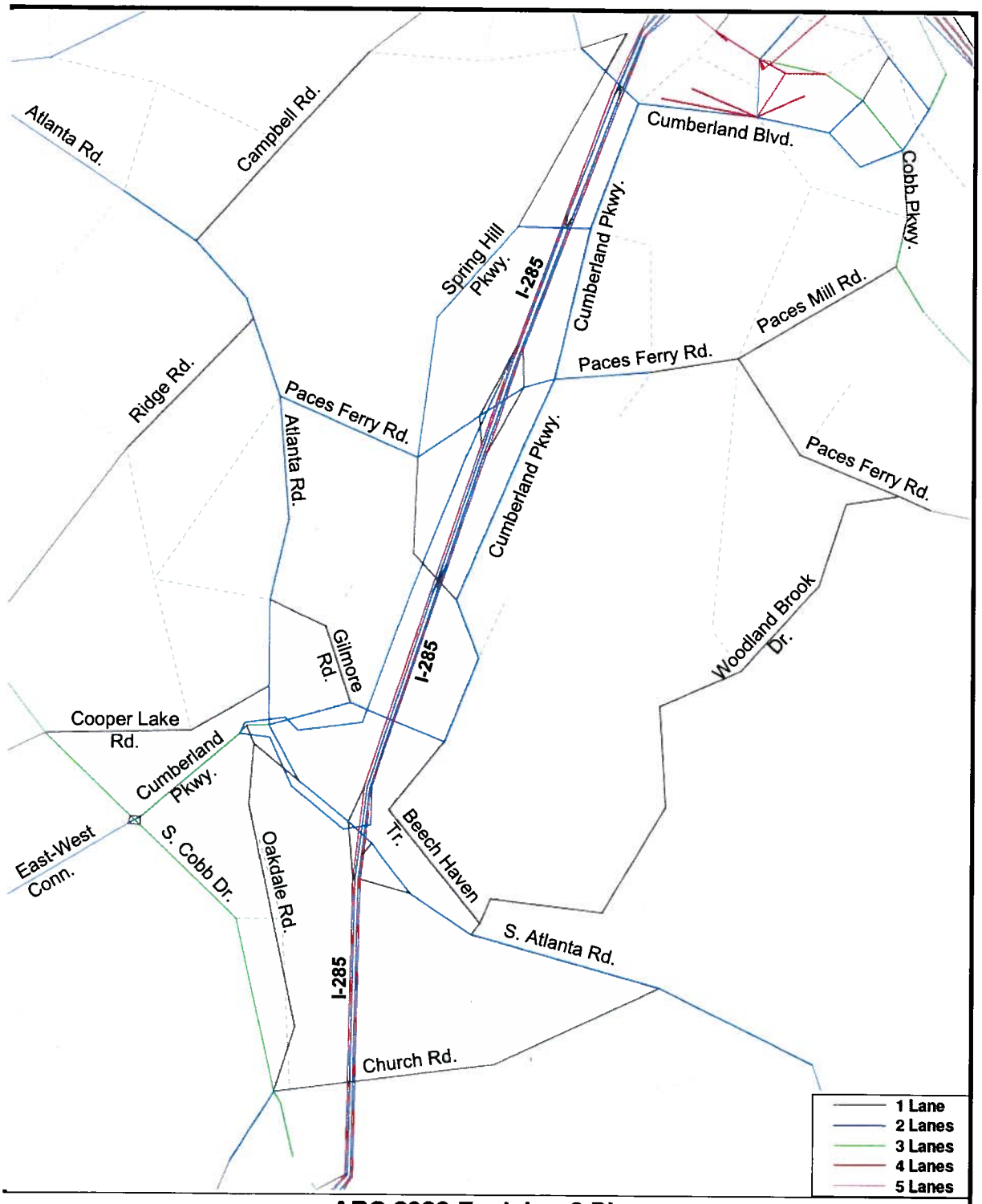
This document represents Post, Buckley, Schuh, & Jernigan, Inc.'s interpretation of the meeting. Please contact the project manager if you have any questions.

Sincerely,

Scott M. Dubord, P.E.
Project Manager

Attachment 10

ARC Conforming Plan Schematic



ARC 2030 Envision 6 Plan

cube

Licensed to Post, Buckley, Schuh & Jernigan, Inc.

Attachment 11

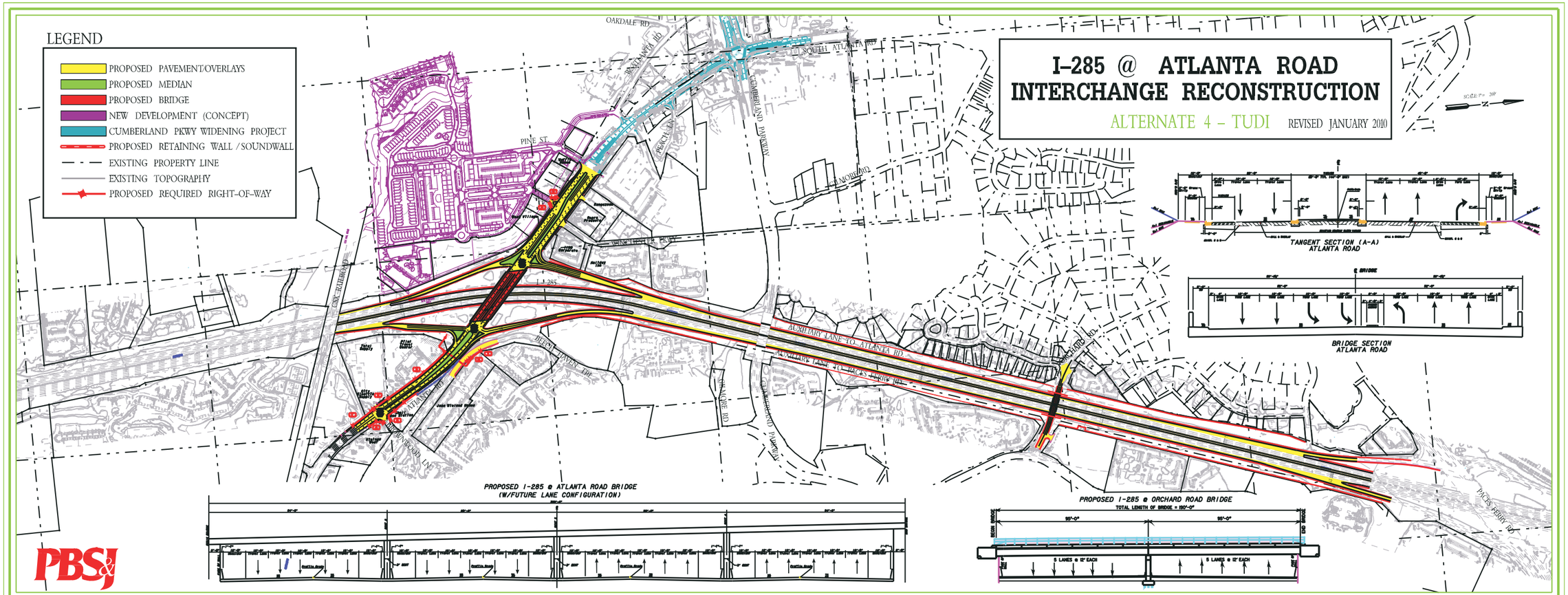
Concept Layout Sheet, 11”x17”
(Not to scale)

I-285 @ ATLANTA ROAD INTERCHANGE RECONSTRUCTION

ALTERNATE 4 – TUDI REVISED JANUARY 2010

LEGEND

- PROPOSED PAVEMENT/OVERLAYS
- PROPOSED MEDIAN
- PROPOSED BRIDGE
- NEW DEVELOPMENT (CONCEPT)
- CUMBERLAND PKWY WIDENING PROJECT
- PROPOSED RETAINING WALL / SOUNDWALL
- EXISTING PROPERTY LINE
- EXISTING TOPOGRAPHY
- PROPOSED REQUIRED RIGHT-OF-WAY

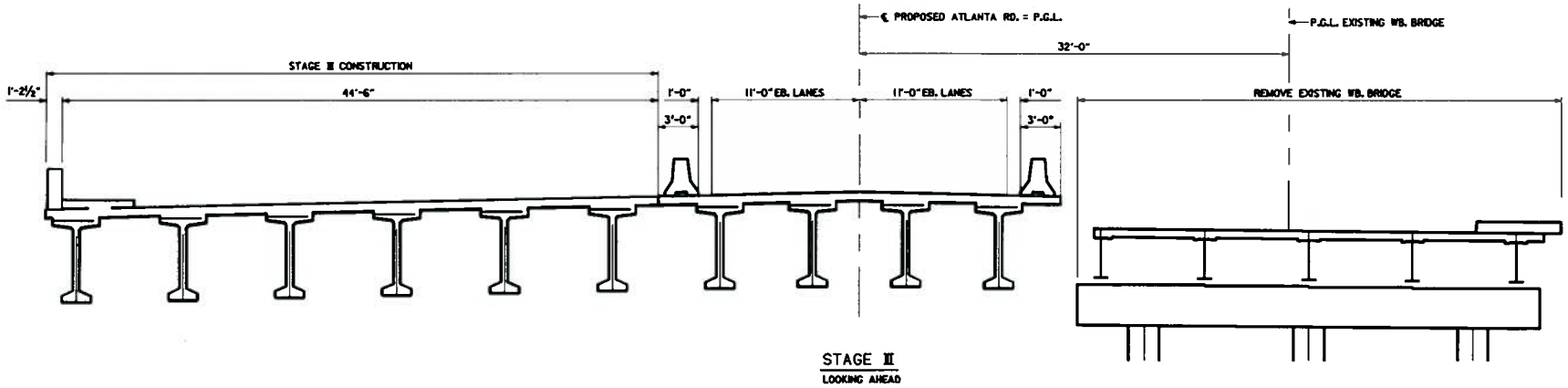


PBSJ

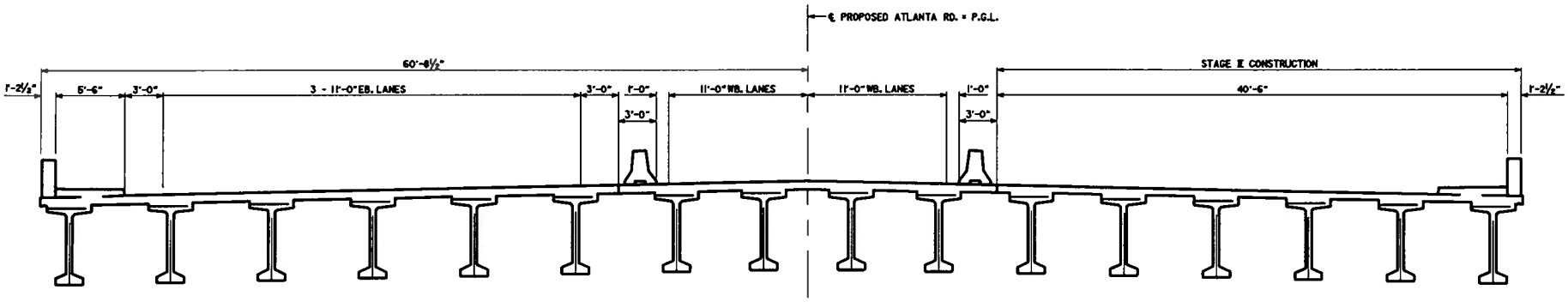
Attachment 12

Bridge Construction Staging

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	STP00-0222-0K001		



STAGE II
LOOKING AHEAD



STAGE II
LOOKING AHEAD

BRIDGE NO. 1

GEORGIA
DEPARTMENT OF TRANSPORTATION
PRECONSTRUCTION DIVISION-OFFICE OF BRIDGE DESIGN

STAGING PLAN (SHT. 2 OF 3)

CR 4519 (ATLANTA RD.) OVER I-285

COBB COUNTY STP00-0222-0K001

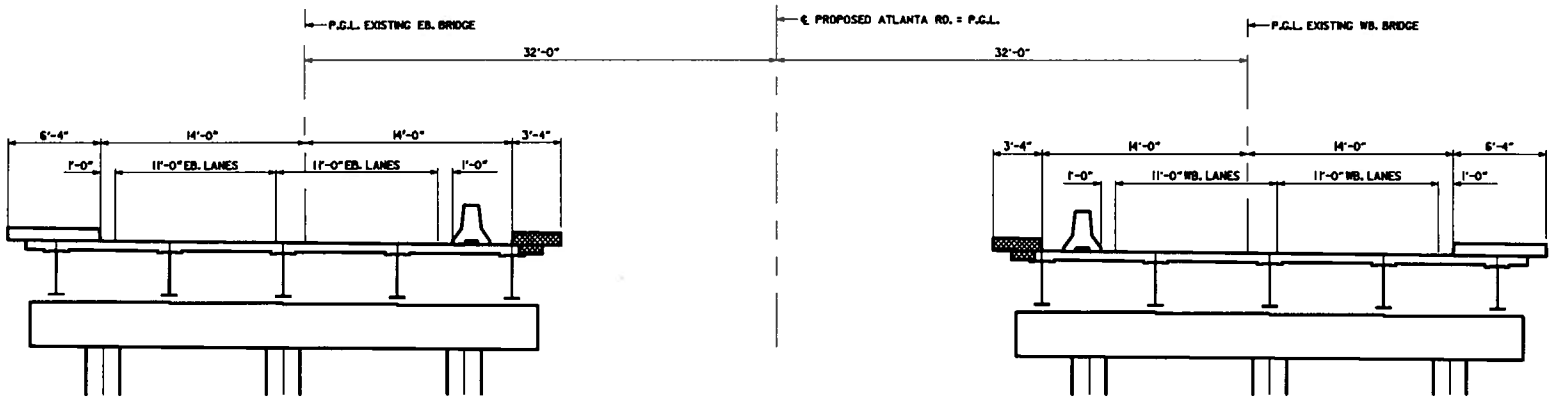
SCALE: 1/4" = 1'-0" DECEMBER 2009

BRIDGE SHEET 2 OF 3

DATE	REVISIONS	BY

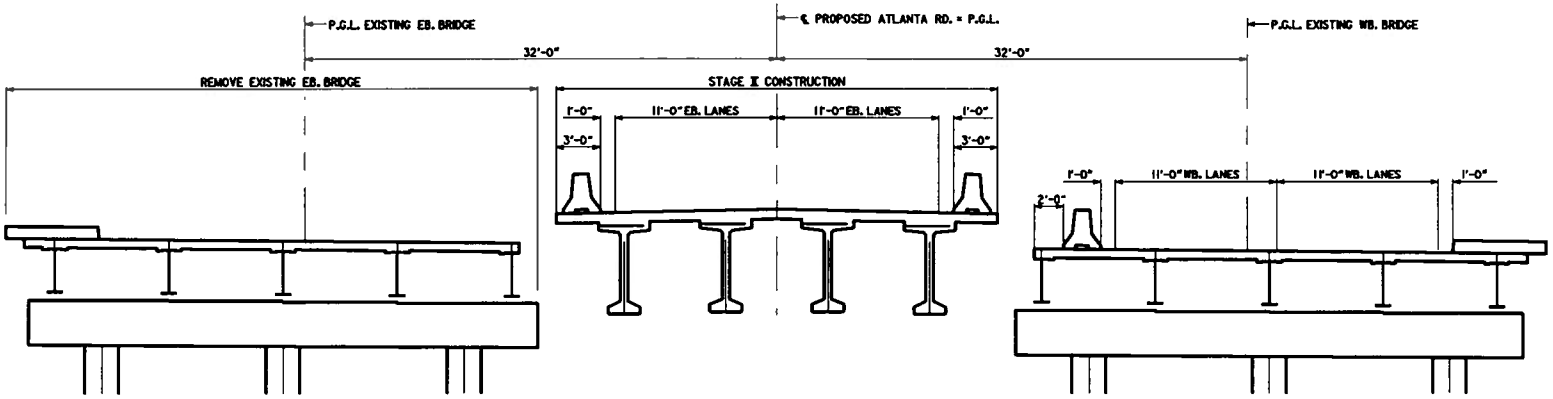
DESIGNED DPD | DRAWN BLB | REVIEWED XXX
DRAWN DPD | DESIGN GROUP XXX | APPROVED XXX

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	STP00-0222-0K00(1)		



STAGE I

LOOKING AHEAD



STAGE II

LOOKING AHEAD

BRIDGE NO. 1

GEORGIA

DEPARTMENT OF TRANSPORTATION

PRECONSTRUCTION DIVISION-OFFICE OF BRIDGE DESIGN

STAGING PLAN (SHT. 1 OF 3)

CR 4519 (ATLANTA RD.) OVER I-285

COBB COUNTY STP00-0222-0K00(1)

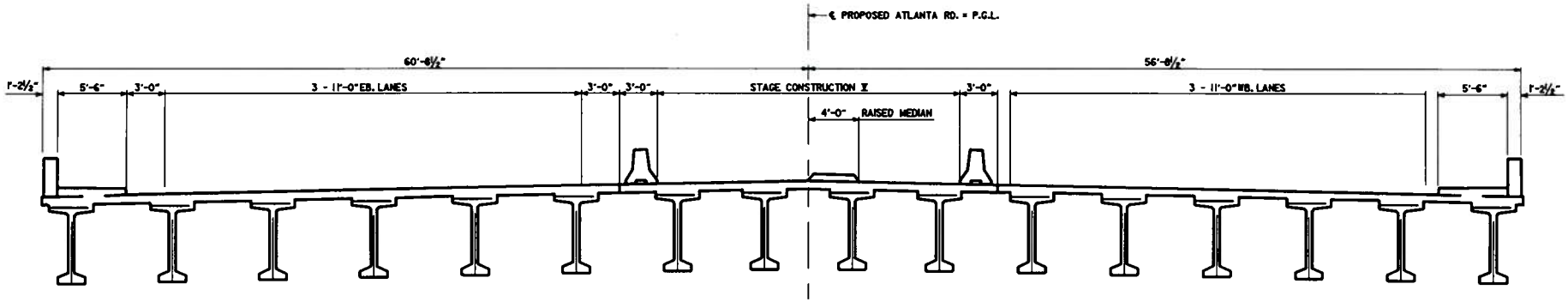
SCALE: 1/4" = 1'-0" DECEMBER 2009

DATE	REVISIONS	BY

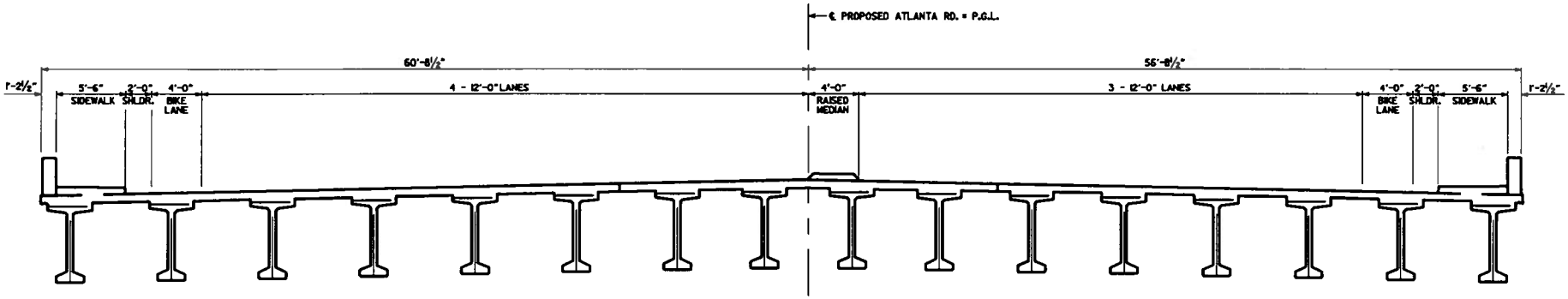
BRIDGE SHEET 1 OF 3

DESIGNED DPD	PROGRAM BLB	REVIEWED XXX
DRAWN DPD	DESIGN GROUP XXX	APPROVED XXX

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	STP00-0222-0K001		



STAGE V
LOOKING AHEAD



STAGE V
LOOKING AHEAD

CONSTRUCTION SEQUENCE

1. PLACE TEMPORARY BARRIERS AS SHOWN ON STAGE I, MAINTAINING 2 - 11'-0" TRAFFIC LANES ON EACH EXISTING BRIDGE. REMOVE PORTIONS OF EXISTING BRIDGES AS NECESSARY.
2. BUILD STAGE II ACCORDING TO PLANS. PLACE TEMPORARY BARRIERS AS SHOWN ON STAGE II.
3. RELOCATE EXISTING EASTBOUND TRAFFIC ONTO THE COMPLETED STAGE II. REMOVE EXISTING EASTBOUND BRIDGE.
4. BUILD STAGE III ACCORDING TO PLANS.
5. RELOCATE EXISTING WESTBOUND TRAFFIC ONTO THE COMPLETED STAGE II .REMOVE EXISTING WESTBOUND BRIDGE.

CONSTRUCTION SEQUENCE (CONT.)

6. BUILD STAGE IV ACCORDING TO PLANS.
7. RELOCATE EXISTING EASTBOUND TRAFFIC ONTO THE COMPLETED STAGE IV.
8. COMPLETE STAGE V, RAISED MEDIAN CONSTRUCTION.
9. REMOVE TEMPORARY BARRIERS AND OPEN COMPLETED BRIDGE TO TRAFFIC.

THE AFOREMENTIONED SEQUENCE SHALL BE COORDINATED WITH ROADWAY OPERATIONS. SEE ROADWAY PLANS. IN LIEU OF THE ABOVE CONSTRUCTION SEQUENCE, THE CONTRACTOR MAY SUBMIT A PROPOSED CONSTRUCTION SEQUENCE FOR APPROVAL.

BRIDGE NO. 1

GEORGIA
DEPARTMENT OF TRANSPORTATION
PRECONSTRUCTION DIVISION-OFFICE OF BRIDGE DESIGN

STAGING PLAN (SHT. 3 OF 3)
CR 4519 (ATLANTA RD.) OVER I-285
COBB COUNTY STP00-0222-0K001

SCALE: 1/4" = 1'-0" DECEMBER 2009

BRIDGE SHEET	DATE	REVISIONS	BY
3 OF 3			

DESIGNED DPD | CHECKED BLB | REVIEWED XXX
DRAWN DPD | DESIGN ENGR XXX | APPROVED XXX

Attachment 13

Benefit Cost Analysis

Attachment 13 BENEFIT-TO-COST RATIO

The procedures used in determining the benefit-to-cost ratio in this analysis were based upon the methodology outlined in A Manual on User Benefit Analysis of Highway and Bus-Transit Improvements. The assumed economic life of the project was 20 years beginning in 2012. Annual 2012 and 2032 benefits, shown in Tables 7.5 and 7.6, were estimated by assuming the estimated daily benefits, both operating and time cost savings that would occur on 300 days within the year. For the purposes of the analysis, the benefits were assumed to increase linearly with the initial benefits occurring in the first year. The analysis assumed a discount rate of 4.0% to reflect the time value of money. This analysis used constant dollars.

The data contained in Tables 7.5 and 7.6 include the annual road user benefits of the project. These benefits include the impact of factors such as:

- Percent heavy trucks and single unit trucks,
- Operating speed on each link,
- Operating cost for run, idle and stop conditions,
- Time cost for auto drivers and passengers at $14.91 per hour,
- Time cost for single unit truck drivers at $16.32 per hour,
- Time cost for heavy truck drivers at $18.65 per hour.

The cost side of the ratio includes costs for maintenance, construction, and right-of-way. Maintenance costs are estimated at an average of $10,000 per lane per mile and $27/ft * width of bridge * number of joints for concrete bridges. The total estimated annual maintenance cost is about $150,000.

Table 7.3
2012 Annual Road User Costs and Benefits Summary

	AM Peak Period			Off-Peak Period			PM Peak Period			Daily			Annual		
Alternate	Operating Cost	Time Costs	Total Costs	Operating Cost	Time Costs	Total Costs	Operating Cost	Time Costs	Total Costs	Operating Cost	Time Costs	Total Costs	Operating Cost	Time Costs	Total Costs
Road User Costs															
No Build	$76,460	$132,126	$208,586	$348,460	$545,706	$894,166	$67,844	$138,700	$206,544	$492,764	$816,532	$1,309,296	$147,829,200	$244,959,600	$392,788,800
Build	$38,216	$64,479	$102,695	$394,800	$616,912	$1,011,712	$34,609	$61,837	$96,446	$467,625	$743,228	$1,210,853	$140,287,500	$222,968,400	$363,255,900
Road User Benefits															
No Build - Build (Benefits)	***$38,244***	***$67,647***	***$105,891***	***($46,340)***	***($71,206)***	***($117,546)***	***$33,235***	***$76,863***	***$110,098***	***$25,139***	***$73,304***	***$98,443***	***$7,541,700***	***$21,991,200***	***$29,532,900***

Table 7.4
2032 Annual Road User Costs and Benefits Summary

	AM Peak Period			Off-Peak Period			PM Peak Period			Daily			Annual		
Alternate	Operating Cost	Time Costs	Total Costs	Operating Cost	Time Costs	Total Costs	Operating Cost	Time Costs	Total Costs	Operating Cost	Time Costs	Total Costs	Operating Cost	Time Costs	Total Costs
Road User Costs															
No Build	$151,822	$285,302	$437,124	$309,146	$599,038	$908,184	$146,324	$315,968	$462,292	$607,292	$1,200,308	$1,807,600	$182,187,600	$360,092,400	$542,280,000
Build	$82,620	$161,120	$243,740	$406,700	$319,998	$710,934	$75,936	$147,514	$223,450	$565,256	$628,632	$1,193,888	$169,576,800	$188,589,600	$358,166,400
Road User Benefits															
No Build - Build (Benefits)	***$69,202***	***$124,182***	***$193,384***	***($97,554)***	***$279,040***	***$197,250***	***$70,388***	***$168,454***	***$238,842***	***$42,036***	***$571,676***	***$613,712***	***$12,610,800***	***$171,502,800***	***$184,113,600***

Table 7.5 provides the detailed calculations necessary to determine the present value of both the benefits and costs of the Build Alternate compared to the No Build Alternate. The benefits used in Table 7.5 reflect only those benefits associated with the operating cost savings and do not include the substantial benefits which would accrue due to the savings in user time costs. The primary purpose of the benefit/cost ratio using just operating costs is to demonstrate the economic efficiency of the proposed improvement with only out-of-pocket costs. The primary purpose of the benefit/cost ratio using both operating costs and travel time costs shown in Table 7.6 is to demonstrate the overall benefits of the proposed improvements. This benefit/cost ratio is commonly accepted as the best measure to evaluate the cost effectiveness of a proposed improvement.

Table 7.5 shows that the Build Alternate will have a benefit-to-cost ratio of 2.94 based on operating costs only. This ratio of 2.94 shows that the operating cost savings attributable to the proposed project will be over three times greater than the cost of constructing and maintaining the proposed project.

Table 7.6 shows the detailed calculations of the present value of the benefits and costs with both operating cost and time cost savings considered. The proposed project will have a benefit/cost ratio of 29.09. Since this ratio is well above 2.00, the Build Alternate is an economically viable alternate. The benefit/cost ratio indicates that when both the operating cost and time cost savings are included, the benefits of the proposed improvements to users will far exceed the cost of constructing and maintaining the new interchange. Based on this analysis, building the proposed project represents a significant improvement over No Build Alternate.

Table 7.5
Financial Feasibility of Build Alternate vs. No Build Alternate
(Highway Operating Costs Only)

YEAR	PW FACTOR	ANNUAL ROAD USER BENEFITS (2007 dollars)	COSTS (2007 dollars)		PRESENT VALUE		NET PRESENT VALUE	
			MAINTENANCE	CONSTRUCTION	ROAD USER BENEFITS	M + C COSTS	ANNUAL	CUMULATIVE
0	1.00000	$0	$0	$42,954,945	$0	$42,954,945	($42,954,945)	($42,954,945)
1	0.96154	$7,541,700	$150,000	$0	$7,251,635	$144,231	$7,107,404	($35,847,541)
2	0.92456	$7,808,495	$150,000	$0	$7,219,392	$138,683	$7,080,709	($28,766,832)
3	0.88900	$8,075,289	$150,000	$0	$7,178,903	$133,349	$7,045,553	($21,721,278)
4	0.85480	$8,342,084	$150,000	$0	$7,130,849	$128,221	$7,002,628	($14,718,650)
5	0.82193	$8,608,879	$150,000	$0	$7,075,871	$123,289	$6,952,582	($7,766,069)
6	0.79031	$8,875,674	$150,000	$0	$7,014,574	$118,547	$6,896,027	($870,042)
7	0.75992	$9,142,468	$150,000	$0	$6,947,525	$113,988	$6,833,537	$5,963,495
8	0.73069	$9,409,263	$150,000	$0	$6,875,256	$109,604	$6,765,653	$12,729,148
9	0.70259	$9,676,058	$150,000	$0	$6,798,270	$105,388	$6,692,882	$19,422,030
10	0.67556	$9,942,853	$150,000	$0	$6,717,035	$101,335	$6,615,700	$26,037,730
11	0.64958	$10,209,647	$150,000	$0	$6,631,992	$97,437	$6,534,555	$32,572,285
12	0.62460	$10,476,442	$150,000	$0	$6,543,555	$93,690	$6,449,865	$39,022,151
13	0.60057	$10,743,237	$150,000	$0	$6,452,110	$90,086	$6,362,024	$45,384,174
14	0.57748	$11,010,032	$150,000	$0	$6,358,019	$86,621	$6,271,398	$51,655,572
15	0.55526	$11,276,826	$150,000	$0	$6,261,621	$83,290	$6,178,332	$57,833,903
16	0.53391	$11,543,621	$150,000	$0	$6,163,234	$80,086	$6,083,147	$63,917,051
17	0.51337	$11,810,416	$150,000	$0	$6,063,151	$77,006	$5,986,146	$69,903,196
18	0.49363	$12,077,211	$150,000	$0	$5,961,651	$74,044	$5,887,607	$75,790,803
19	0.47464	$12,344,005	$150,000	$0	$5,858,989	$71,196	$5,787,792	$81,578,595
20	0.45639	$12,610,800	$150,000	$0	$5,755,405	$68,458	$5,686,946	$87,265,542
TOTAL		$201,525,000	$3,000,000	$42,954,945	$132,259,035	$44,993,494	$87,265,542	

NOTE:

ASSUMED DISCOUNT RATE: 4.0%

(This rate does not include inflation)

BENEFIT-TO-COST RATIO: 2.94

Table 7.6

Financial Feasibility of Build Alternate vs. No Build Alternate

(Includes Highway Operating Costs and User Time Cost Savings)

YEAR	PW FACTOR	ANNUAL ROAD USER BENEFITS (2007 dollars)	COSTS (2007 dollars)		PRESENT VALUE		NET PRESENT VALUE	
			MAINTENANCE	CONSTRUCTION	ROAD USER BENEFITS	M + C COSTS	ANNUAL	CUMULATIVE
0	1.00000	$0	$0	$42,954,945	$0	$42,954,945	($42,954,945)	($42,954,945)
1	0.96154	$29,532,900	$150,000	$0	$28,397,019	$144,231	$28,252,788	($14,702,156)
2	0.92456	$37,668,726	$150,000	$0	$34,826,855	$138,683	$34,688,172	$19,986,015
3	0.88900	$45,804,553	$150,000	$0	$40,720,081	$133,349	$40,586,731	$60,572,746
4	0.85480	$53,940,379	$150,000	$0	$46,108,462	$128,221	$45,980,241	$106,552,988
5	0.82193	$62,076,205	$150,000	$0	$51,022,116	$123,289	$50,898,827	$157,451,815
6	0.79031	$70,212,032	$150,000	$0	$55,489,588	$118,547	$55,371,041	$212,822,856
7	0.75992	$78,347,858	$150,000	$0	$59,537,933	$113,988	$59,423,945	$272,246,801
8	0.73069	$86,483,684	$150,000	$0	$63,192,781	$109,604	$63,083,177	$335,329,978
9	0.70259	$94,619,511	$150,000	$0	$66,478,413	$105,388	$66,373,025	$401,703,003
10	0.67556	$102,755,337	$150,000	$0	$69,417,824	$101,335	$69,316,489	$471,019,492
11	0.64958	$110,891,163	$150,000	$0	$72,032,785	$97,437	$71,935,348	$542,954,840
12	0.62460	$119,026,989	$150,000	$0	$74,343,906	$93,690	$74,250,217	$617,205,057
13	0.60057	$127,162,816	$150,000	$0	$76,370,692	$90,086	$76,280,606	$693,485,663
14	0.57748	$135,298,642	$150,000	$0	$78,131,595	$86,621	$78,044,973	$771,530,636
15	0.55526	$143,434,468	$150,000	$0	$79,644,069	$83,290	$79,560,779	$851,091,415
16	0.53391	$151,570,295	$150,000	$0	$80,924,620	$80,086	$80,844,533	$931,935,949
17	0.51337	$159,706,121	$150,000	$0	$81,988,850	$77,006	$81,911,844	$1,013,847,793
18	0.49363	$167,841,947	$150,000	$0	$82,851,505	$74,044	$82,777,461	$1,096,625,253
19	0.47464	$175,977,774	$150,000	$0	$83,526,517	$71,196	$83,455,321	$1,180,080,574
20	0.45639	$184,113,600	$150,000	$0	$84,027,044	$68,458	$83,958,586	$1,264,039,160
TOTAL		$2,136,465,000	$3,000,000	$42,954,945	$1,309,032,653	$44,993,494	$1,264,039,160	

NOTE:

ASSUMED DISCOUNT RATE: 4.0%

(This rate does not include inflation)

BENEFIT-TO-COST RATIO: 29.09

Procedures for Estimating Road User Costs for Benefit/Cost Calculations

Road user costs are typically defined as the total cost associated with operating a vehicle (automobile, single unit truck or combination truck) on the roadway network plus the cost of time for the driver and any passengers in the vehicle. The costs related to operating a vehicle are generally referred to as operating costs and considered to have the following components:

- Fuel,
- Engine Oil,
- Tires,
- Insurance,
- Maintenance, and
- Vehicle Depreciation.

The initial step in determining road user cost for each alternate and time period was to establish the operating characteristics for each link of the roadway network. These operating characteristics were determined through the application of the CORSIM traffic simulation model that provided the following operating characteristics for each network link:

- Total Volume,
- Operating Speed,
- Total Travel Time,
- Total Delay Time,
- Total Stop Time, and
- Percentage of Vehicles Stopped.

The values of the key operating characteristics listed above for each time period (A.M., P.M., and Off-peak) for the alternates are shown in the Technical Appendix, Appendix A of the Interchange Modification Report. These values were used to determine the daily operating costs for each link of the network. The procedures used in estimating the road user costs are described in detail next. The CORSIM networks are also illustrated in the Technical Appendix, Appendix A of the Interchange Modification Report.

The procedure for estimating operating cost for each link was to initially determine running costs for each vehicle type using Tables B-4, B-5, B-6 in the report A Manual On User Benefits Analysis Of Highway and Bus-Transit Improvements, published by the American Association of State Highway and Transportation Officials (AASHTO). These basic running costs were then adjusted for grade, horizontal curvature, idling and change of speed (transition) using Tables B-7 through B-12 of the referenced report. The adjusted basic running cost was then used to estimate the total operating cost on each link by time period and alternate based upon the link traffic volume and distance.

The time cost component of the road user is the actual travel time for all persons in the vehicles multiplied by an assumed monetary value of time, generally in dollars per hour. For the purposes of this analysis assumed vehicle occupancy was established for both peak and off-peak periods by vehicle classification (automobile, single unit trucks and combination trucks). The assumed vehicle occupancies for the peak periods (both A.M. and P.M.) were:

- Automobile - 1.2 persons per vehicle;
- Single Unit Trucks - 1.0 persons per vehicle; and
- Combination Trucks - 1.0 persons per vehicle.

For the off-peak period, the assumed vehicle occupancy rates were:

- Automobile - 1.4 persons per vehicle;
- Single Unit Trucks - 1.0 persons per vehicle; and
- Combination Trucks - 1.0 persons per vehicle.

The assumed hourly time values, in 2007 dollars, for all periods, per person by vehicle classification were:

- Automobile - $14.91 per hour
- Single Unit Trucks - $16.32 per hour
- Combination Trucks - $18.65 per hour

The time cost for each link was determined based upon the estimated total travel time for the link. These time costs were estimated for each vehicle classification using the vehicle occupancy, time value rates and link travel times.

For the purposes of this analysis, an eighteen hour traffic day was employed consisting of the typical period durations shown in Table 1.

Table 1
Typical Peak Period Durations

	No Build Duration		Build Duration	
Period	**2012**	**2032**	**2012**	**2032**
A.M. Peak	2	4	1	2
Off-Peak	14	10	16	14
P.M. Peak	2	4	1	2

The duration of these time periods were adjusted for conditions on links where congestion levels during the peak period(s) would extend beyond the typical one hour period. Because of the capacity constraints of the I-285 system, the peak periods extend beyond the typical one hour period. For the Build Alternate a two hour peak period was determined appropriate for 2032. In the case of the No Build Alternate, the peak periods were expanded to two hours in 2012 and four hours in 2032 to allow the projected volume to flow through the network. This provided for a true comparison of the alternates since an equal amount of traffic and its associated costs were compared.

Attachment 14

Implementation of Value Engineering Study Alternatives

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: STP00-0222-01(001) Cobb
P.I. No.: 752300
I-285@CR 4519/Atlanta Road

OFFICE: Engineering Services

DATE: January 20, 2010

FROM: Ronald E. Wishon, State Project Review Engineer REW

TO: Russell R. McMurry, PE, State Roadway Design Engineer

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

The VE Study for the above project was held June 1-4, 2009. Responses were received on January 20, 2010. Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. The Project Manager shall incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT #	Description	Potential Savings/LCC	Implement	Comments
B2-1	Build Atlanta Road Bridge over I-285 so that it can be expanded later	$885,602	No	Several bridges along the I-285 corridor in Cobb County have been built to accommodate the 5-5-5-5 future I-285/CD system lane configuration. Although there is an initial cost savings, the implementation of this VE recommendation would create increased costs for the future I-285 expansion and the need for additional MSE walls.
B2-2	Use MSE walls for the CSX bridge and shorten the bridge	$6,195	No	Due to the change in the preferred alternate, the Ramp C bridge over CSX is no longer part of the design. This recommendation no longer applies.
B2-3	Reduce the median width on the Atlanta Road bridge over I-285 and the approaches by 14 feet	$561,668	No	This recommendation only applies to the Partial Cloverleaf interchange configuration, which will not be used. This recommendation no longer applies.
B2-6	Build Orchard Road bridge over 10 lanes of I-285 now and allow for an extension later	$324,339	Yes	This will be done.

B2-7	Use 5 ½ ft wide sidewalks in lieu of 6 ft and 8 ft sidewalks on the bridges	$228,911	Yes	This will be done.
B2-8	Take the sidewalk off the eastbound side o the Atlanta Road Bridge over I-285 and narrow the bridge	$196,067	No	Since the preferred alternate has been changed to the more pedestrian friendly urban diamond configuration, the VE Team's concerns associated with pedestrian crossings adjacent to the two lane free-flow ramp are no longer warranted. Due to the highly urban, pedestrian friendly land use along the Atlanta Road corridor, the sidewalk will remain on both sides of the Atlanta Road bridge.
H2-4.1	Make Ramp D a single loop ramp	$45,069	No	This recommendation only applies to the Partial Cloverleaf interchange configuration, which will not be used. Ramp D has been removed from the proposed design. This recommendation no longer applies.
H2-4.2	Extend the two lane portion of Ramp D	Design Suggestion	No	This recommendation only applies to the Partial Cloverleaf interchange configuration, which will not be used. Ramp D has been removed from the proposed design. This recommendation no longer applies.
H2-5	Use fill between I-285 and the west side of Ramp C in lieu of MSE wall	$326,195	No	This recommendation only applies to the Partial Cloverleaf interchange configuration, which will not be used. Ramp C has been removed from the proposed design. This recommendation no longer applies.
H2-6	Raise the Atlanta Road Bridge over I-285 to avoid having to lower the Colonial Pipeline	$1,706,000	Yes	The proposed NB exit ramp will be relocated to match the existing NB exit ramp alignment and profile. Due to the change in preferred alternative, the Atlanta Road grade is no longer controlled by the elevation of Ramp D (removed from the design); therefore, the potential for conflict with the Colonial and Plantation Pipelines is eliminated.

A4-1	Alternative Design 4 – Save Warehouse by retaining drive access at intersection with Atlanta Road./Brownwood Lane	$3,654,927	Yes	This will be done.
A4-2	Build Atlanta Road Bridge so that it can be lengthened at both ends in the future	$1,636,808	No	The 5-5-5-5 bridge span configuration will remain in place as noted in the response to VE Alternative B2-1.
A4-3	Retain a portion of the existing northbound exit ramp to Atlanta Road	$224,580	Yes	This will be done. The operational improvements recommended for Atlanta Road should eliminate concern over queuing traffic accumulating on the shorter exit ramp.

The Office of Engineering Services concurs with the Project Manager's responses.

Approved: _____ **Date:** 11/20/10
Gerald M. Ross, PE, Chief Engineer

Approved: Richard Wayne Fedora **Date:** 2/25/2010
for **Rodney Barry, PE, FHWA Division Administrator**

REW/LLM
Attachments
c: R. Wayne Fedora/Mindy Roberson/Latoya Johnson - FHWA
Ben Buchan
Paul Liles/Bill Duvall/Bill Ingalsbe/Doug Franks
Russell McMurry/Darrell Richardson/Butch Welch/Marcela Coll/Aisha Rowland
Larry Bowman
Mickey McGee/Sebastian Nesbitt/Dale Ferris
Nabil Raad
Lisa Myers
Matt Sanders

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP00-0222-01(001), Cobb County
I-285 @ CR 4519/ Atlanta Road
P.I. No. 752300

OFFICE Roadway Design

DATE January 19, 2010

FROM Russell R. McMurry, P.E., State Roadway Design Engineer

TO Ronald E. Wishon, Project Review Engineer
Attention: Matt Sanders

SUBJECT **VALUE ENGINEERING STUDY REPORT RESPONSES**

The above mentioned project will improve the operational efficiency of the Atlanta Road at I-285 interchange. The improvements proposed along Atlanta Road would occur from just west of the intersection of Atlanta Road and N. Church Lane and end at the intersection of Atlanta Road and Pine Street. Total project length is approximately 0.78 mile along Atlanta Road and approximately 1.97 miles along I-285.

PBS&J is the consultant for Cobb County who is the project's sponsor. They have addressed the Value Engineering Study Report recommendations on behalf of the County. Please see their attached letter.

The Roadway Design Office has reviewed the submitted responses and concurs. We are forwarding them for your review and implementation.

If further assistance is needed, please contact Albert Welch (404) 631-1690 or Marcela Coll at (404) 631-1692.

RRM:ASW:mgc

PBSJ

An employee-owned company

RECEIVED
JAN 11 2010
ROADWAY DESIGN

McMurry
Casey
Hasty
McCook
Richardson Butch
Other
File

January 11, 2010

Ronald E. Wishon, Acting State Project Review Engineer
Georgia Department of Transportation
One Georgia Center
600 West Peachtree Street, N.W.
Atlanta, Georgia 30308

Attention: Lisa Myers

RE: I-285 @ CR 4519/Atlanta Road Interchange
STP00-0222-01(001), Cobb County
P.I. No. 752300
Value Engineering Study Responses

Dear Mr. Wishon:

Reference is made to the recommendations that were contained in the Value Engineering Study Final Report issued June 22, 2009 for the above referenced project. Bear in mind that since the Value Engineering Study was held, the preferred alternate for the I-285/Atlanta Road interchange has changed from the Partial Cloverleaf scheme to the Tight-Urban Diamond configuration. Our responses and recommendations are as follows:

1. **Value Engineering Alternative No. B2-1** – Build Atlanta Road Bridge over I-285 as three spans with the capability of being expanded to four spans when I-285 is expanded to 10 lanes in each direction. **(Cost savings: $885,603)**

Recommendation

Approval of the VE Alternative No. B2-1 is not recommended.

- *Several bridge projects in this Cobb County/I-285 corridor have been built to accommodate the 5-5-5-5 future I-285/CD system lane configuration. Keeping the span configuration as-is will assure sectional consistency throughout the corridor regardless of what the ultimate I-285 typical section is.*
- *Despite an initial cost savings, the VE alternative is not recommended for implementation due to the costs associated with the future I-285 expansion and the need for additional permanent MSE walls and the likelihood of maintenance of traffic difficulties.*

2. **Value Engineering Alternative No. B2-2** – Use mechanically stabilized earth walls (MSE) for Ramp C Bridge over CSX Railroad and eliminate end spans **(Cost savings: $6,195)**

Recommendation

Approval of the VE Alternative No. B2-2 is not recommended.

- *Due to the change in preferred alternate, the Ramp C bridge over CSX is no longer part of the design.*

3. **Value Engineering Alternative No. B2-3** – Reduce the median width on the Atlanta Road bridge over I-285 by 14 feet and the approach roadway on either side of the bridge **(Cost savings: $561,668)**

Recommendation

Approval of the VE Alternative No. B2-3 is not recommended.

- *This recommendation applies only to the Partial Cloverleaf interchange configuration, which will not be implemented. The Atlanta Road median width for the Tight Urban Diamond interchange is eight (8) feet.*

4. **Value Engineering Alternative No. B2-6** – Build Orchard Road Bridge over I-285 as two spans with the capability of expanding to four spans when I-285 is expanded to 10 lanes in each direction **(Cost savings: $324,339)**

Recommendation

Approval of the VE Alternative No. B2-6 is recommended

- *Despite the fact that all recent bridge projects in this Cobb County/I-285 corridor have been built to accommodate the 5-5-5-5 future I-285/CD system lane configuration, the VE alternative is recommended for implementation given the large initial cost savings. Bear in mind, the costs associated with the future I-285 expansion will be significant due to need for additional permanent MSE walls.*
- *This span configuration is recommended at Orchard Rd and not at Atlanta Road because complications and costs associated with maintenance of traffic are not an issue at Orchard Road. Orchard Road is closed to thru traffic during the construction of this project and would almost certainly be closed if I-285 were to be widened.*

5. **Value Engineering Alternative No. B2-7** – Use 5 ft-6 in. wide sidewalks (both sides) for the Atlanta Road Bridge over I-285 and Orchard Rd over I-285 **(Cost savings: $218,911)**

Recommendation

Approval of the VE Alternative No. B2-7 is recommended.

- *Recommend deferring to new GDOT bridge width policy, as stated.*

6. **Value Engineering Alternative No. B2-8** – Remove sidewalk from eastbound side of Atlanta Road Bridge over I-285 **(Cost savings: $196,066)**

Recommendation

Approval of the VE Alternative No. B2-8 is not recommended.

- *Do to the highly urban, pedestrian friendly land-use along the Atlanta Road corridor, it is preferred that sidewalk remain on both sides of the Atlanta Road bridge.*
- *Since the preferred alternate has changed to the more pedestrian-friendly urban diamond configuration, the VE team's concerns associated with pedestrian crossings adjacent to the two lane free-flow ramp are no longer warranted.*
- *This alternative does not provide enough of a cost savings to justify the decrease in pedestrian access.*

7. **Value Engineering Alternative No. H2-4.1** – Make Ramp D (loop ramp) a single lane ramp in lieu of a partial two-lane ramp **(Cost savings: $45,070)**

Recommendation

Approval of the VE Alternative No. H2-4.1 is not recommended.

- *This recommendation applies only to the Partial Cloverleaf interchange configuration, which will not be implemented. Ramp D has been removed from the proposed design.*

8. **Value Engineering Alternative No. H2-4.2** – Extend two lanes of Ramp D as far as possible **(Design Suggestion)**

Recommendation

Approval of the VE Alternative No. H2-4.2 is not recommended.

- *This recommendation applies only to the Partial Cloverleaf interchange configuration, which will not be implemented. Ramp D has been removed from the proposed design.*

9. **Value Engineering Alternative No. H2-5** – Use fill between I-285 and the west side of Ramp C in lieu of MSE wall **(Cost savings: $326,195)**

Recommendation

Approval of the VE Alternative No. H2-5 is not recommended.

- *This alternative represented the intended concept by the designer. The cross-sections did not reflect a recent change to the plans (as shown on the plans by the construction limits).*
- *This recommendation applies only to the Partial Cloverleaf interchange configuration, which will not be implemented. Ramp C has been removed from the proposed design.*

10. **Value Engineering Alternative No. H2-6** – Raise the Atlanta Road Bridge over I-285 to avoid having to lower the Colonial Pipeline **(Cost savings: $1,606,000)**

Recommendation

Approval of the VE Alternative No. H2-6 is recommended, with stipulations.

- *The proposed NB exit ramp will be relocated to match the existing NB existing ramp alignment & profile. Due to the change in preferred alternatives, the Atlanta Rd grade is no longer controlled by the elevation of Ramp D (removed from the design), and therefore the potential for conflicts with the Colonial and Plantation Pipelines is eliminated.*
- *Existing pipeline elevations based on plans and datum provided by the utility companies. Inverts will need to be field verified.*

Please note: The following three VE alternatives pertain specifically to the Tight Urban Diamond interchange (TUDI) concept (Alternate 4) as it was presented at the time of the VE study.

11. **Value Engineering Alternative No. A4-1** – Save the warehouse by providing access at a signalized intersection with Brownwood Lane **(Cost savings: $3,654,926)**

Recommendation

Approval of the VE Alternative No. A4-1 is recommended

- *This alternative is recommended as a revision to Alt. 4, in an effort to reduce costs.*

12. **Value Engineering Alternative No. A4-2** – Build Atlanta Road Bridge so that it can lengthened at both ends in the future **(Cost savings: $1,636,808)**

Recommendation

Approval of the VE Alternative No. A4-2 is not recommended

- *The 5-5-5-5 bridge span configuration will remain in-place as noted in the response to VE Alternative B2-1.*

13. **Value Engineering Alternative No. A4-3** – Retain a portion of the existing I-285 northbound exit ramp to Atlanta Road **(Cost savings: $224,581)**

Recommendation

Approval of the VE Alternative No. A4-3 is recommended

- *This alternative is recommended as a revision to Alt. 4, in an effort to reduce costs. The operational improvements recommended for Atlanta Road should eliminate concern over queuing traffic accumulating on the shorter exit ramp.*

If you have any questions or comments, please contact me at (770) 933-0280.

Sincerely,

PBS&J

Scott M. Dubord, P.E.
Project Manager

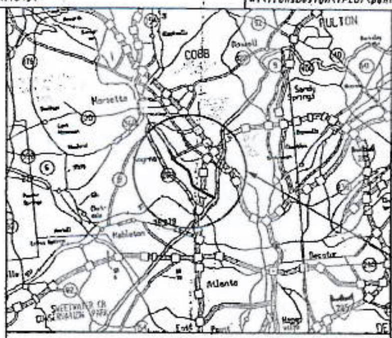
cc: File (062018)

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	STP00-0222-01(001)		

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PLAN AND PROFILE OF PROPOSED
I-285 @ CR 4519/ATLANTA ROAD
COBB COUNTY
FEDERAL AID PROJECT

FEDERAL ROUTE # 285
STATE ROUTE # 407
P.I. NO. 752300



PROJECT STP00-0222-01(001)
COBB COUNTY

LOCATION SKETCH

DESIGN DATA: AASHTO 2004
TRAFFIC A.D.T.: (2012)
TRAFFIC A.D.T.: (2032)
TRAFFIC D.H.V.: (2032)
DIRECTIONAL DIST:
% TRUCKS:
24 HR.TRUCKS %:
SPEED DESIGN:

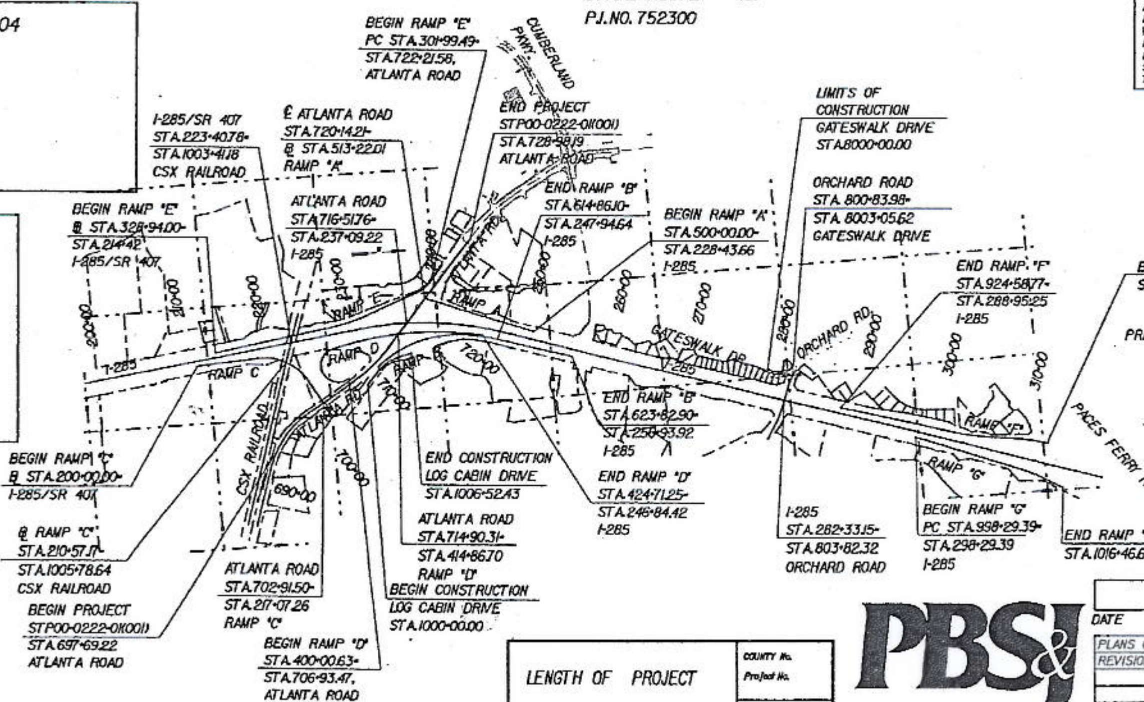
LOCATION & DESIGN APPROVAL DATE:

FUNCTIONAL CLASS:

THIS PROJECT IS 100% IN COBB COUNTY AND IS 100% IN CONG.DIST.NO.11.

PROJECT DESIGNATION:
DESIGNED IN ENGLISH UNITS.

THIS PROJECT HAS BEEN PREPARED USING THE HORIZONTAL GEORGIA COORDINATE SYSTEM OF 1984 (NAD 1983/94 WEST ZONE, AND THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.



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VE PACKAGE
5-11-09

PREPARED BY: ______________ DESIGN

RECOMMENDED FOR SUBMISSION BY: ______________ DESIGN

SUBMITTED BY: ______________ STATE DESIGN ENGINEER

LENGTH OF PROJECT	COUNTY No. / Project No.
	MILES
NET LENGTH OF ROADWAY	
NET LENGTH OF BRIDGES	
NET LENGTH OF PROJECT	
NET LENGTH OF EXCEPTIONS	
GROSS LENGTH OF PROJECT	

PBS&J

SCALE IN FEET
0 1000 2000 4000

DATE	CHIEF ENGINEER
PLANS COMPLETED	- -
REVISIONS	

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.

VE Study Implementation Meeting

February 25, 2010

STP00-0222-01(001) Cobb PI No. 752300

An implementation meeting was held for the Atlanta Road project on February 25, 2010. Mindy Roberson with FHWA, David Jackson with Cobb County, Denny Meier, Ron Morris, and Scott Dubord with PDS&J, Ben Buchan, Russell McMurray, Butch Welch, Marcela Coll, Ron Wishon, Lisa Myers and Matt Sanders with GDOT were in attendance.

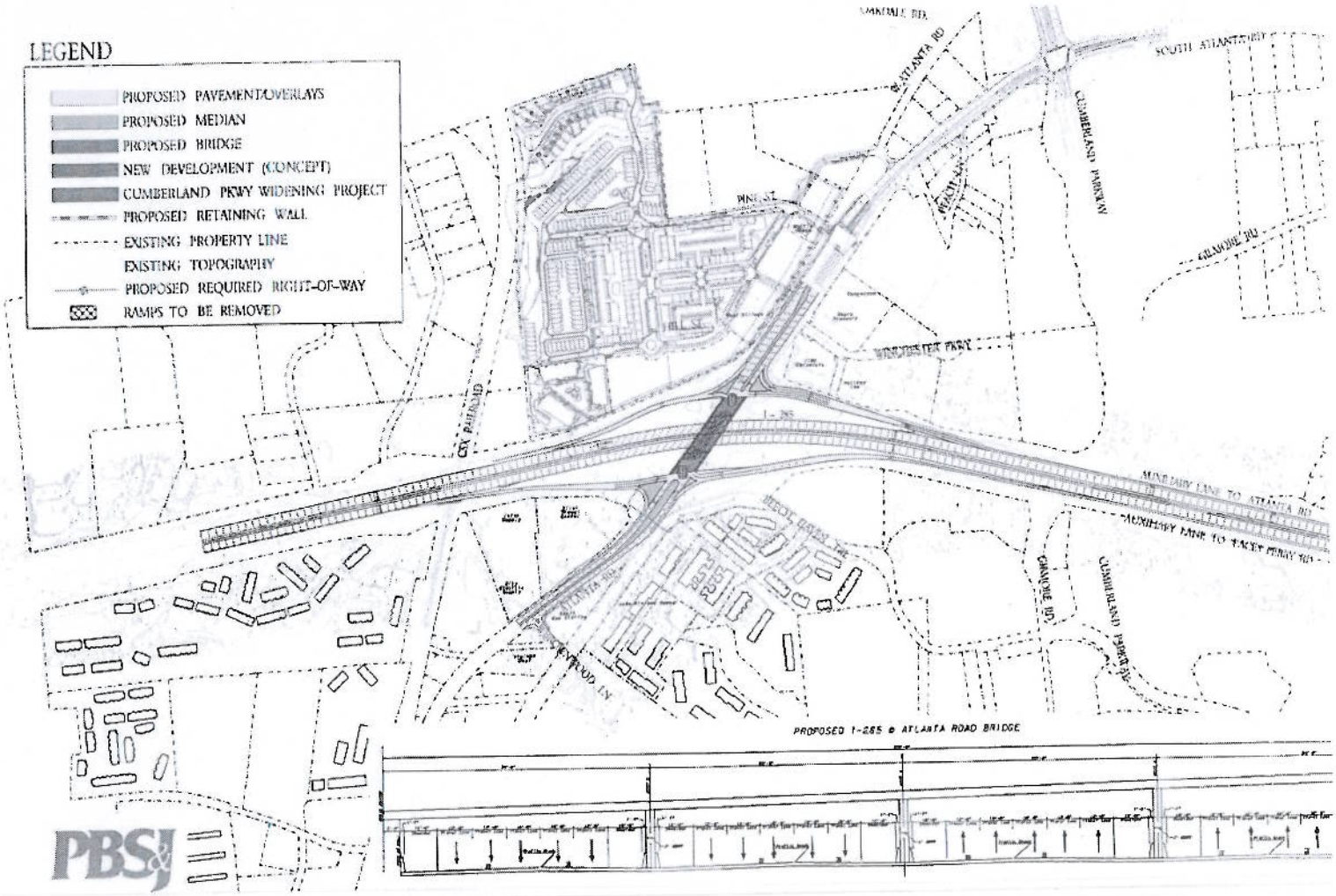
The main purpose of the meeting was to clarify the proposed design for each of the alternates and to discuss the proposed lane configuration for future expansion of I-285.

Alternate 2 is a partial diamond/partial cloverleaf interchange with a loop ramp located in the SE quadrant. The construction of the loop ramp would require two displacements. Alternate 2 was the alternate preferred by Cobb County, prior to the VE Study.

Alternate 4 is a tight urban diamond interchange. No displacements have been identified with this alternate at this time. After the VE Study was held, a decision was made to utilize the TUDI, and Alternate 4 is now the preferred alignment.

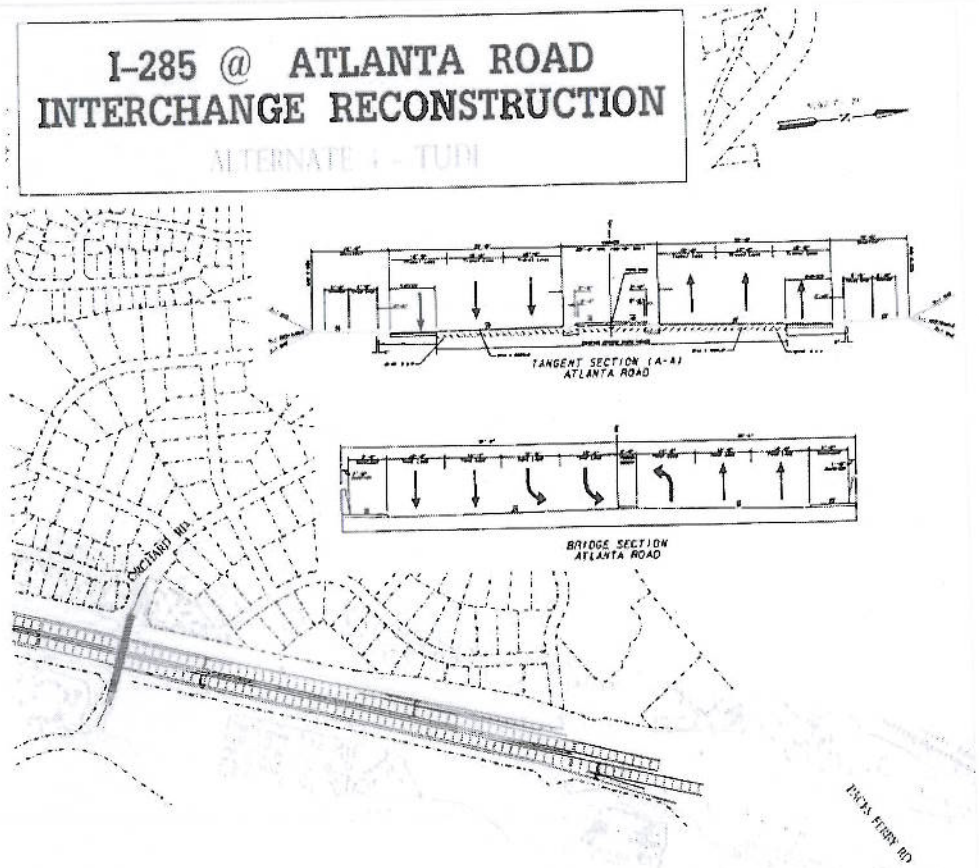
Various lane configurations have been considered for I-285. At the time of the VE Study, a managed lane study had not been completed. Other bridges along the I-285 corridor in the vicinity of Atlanta Road have been built to accommodate a 5-5-5-5 lane configuration.

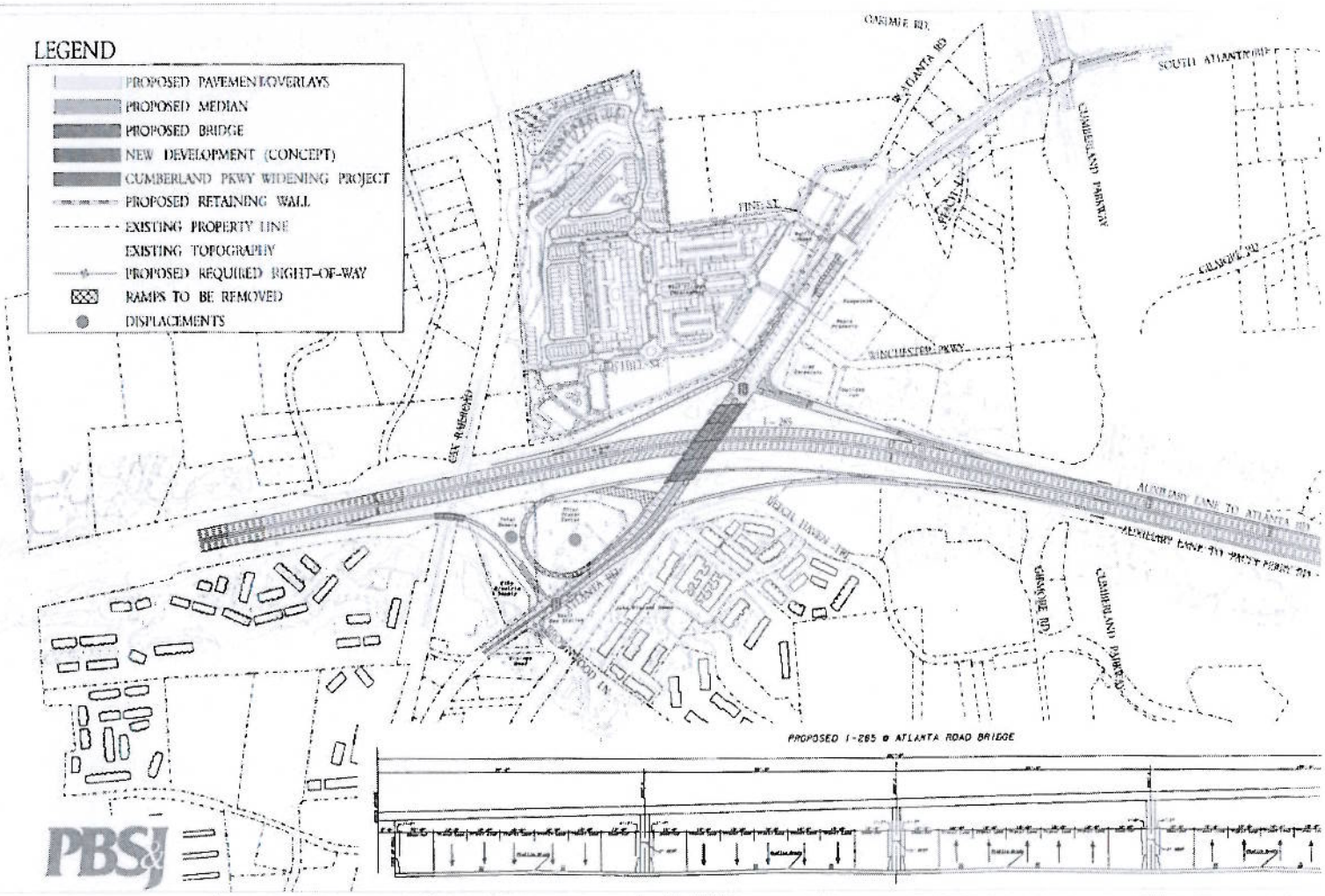
It was reconfirmed by all parties that the Atlanta Road project should be built to accommodate the 5-5-5-5 configuration as well. Using a shorter structure for the Atlanta Road bridge would provide some initial cost savings, but it would make future lengthening difficult. Stage construction would require closures on Atlanta Road that would greatly disrupt traffic. The close proximity of the interstate ramps in the TUDI alternate would make staging difficult and could require closures of the ramps. Any initial cost savings would likely be negated by increase staging costs. The location of the ramps must take into account the 5-5-5-5 configuration so as not to require reconstruction in the future.

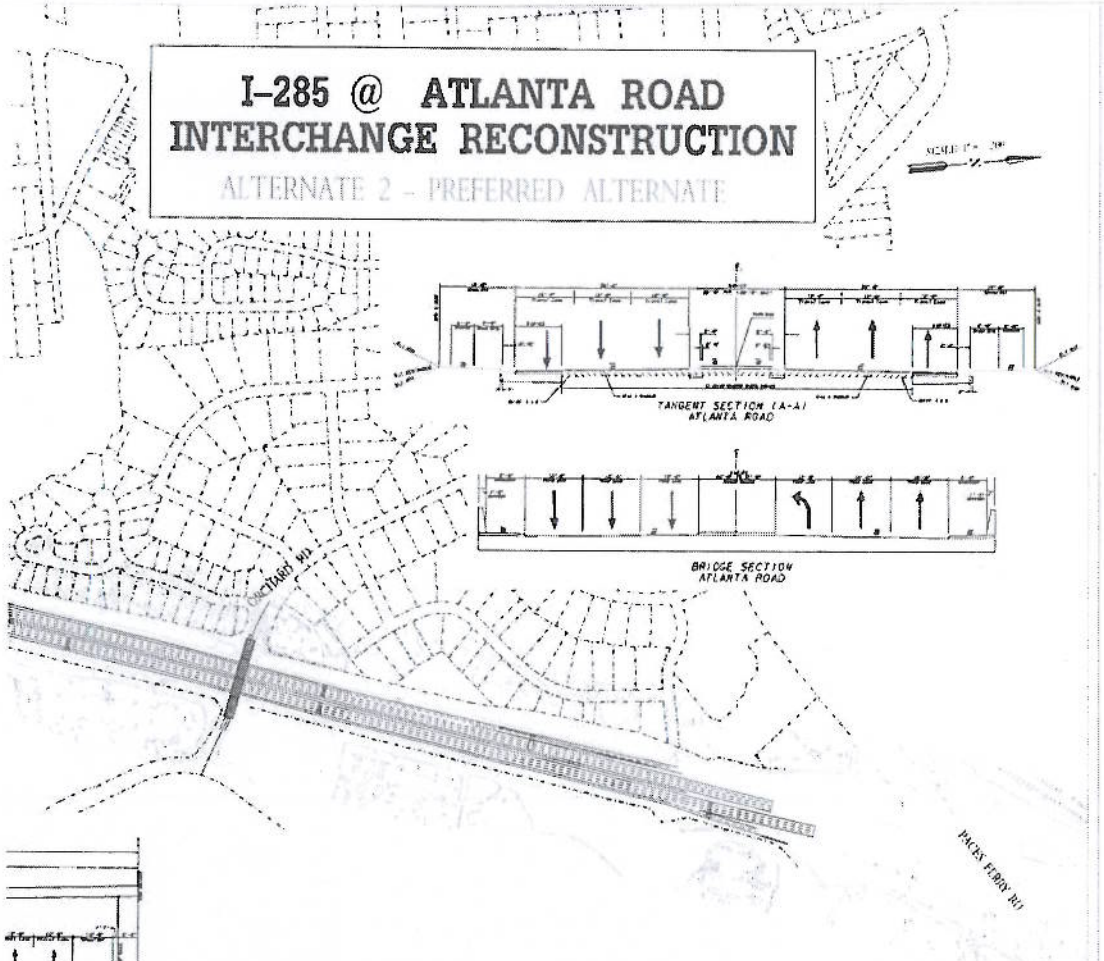


I-285 @ ATLANTA ROAD INTERCHANGE RECONSTRUCTION

ALTERNATE 4 - TUDI




LEGEND
PROPOSED PAVEMENT/OVERLAYS
PROPOSED MEDIAN
PROPOSED BRIDGE
NEW DEVELOPMENT (CONCEPT)
CUMBERLAND PKWY WIDENING PROJECT
PROPOSED RETAINING WALL
EXISTING PROPERTY LINE
EXISTING TOPOGRAPHY
PROPOSED REQUIRED RIGHT-OF-WAY
RAMPS TO BE REMOVED
DISPLACEMENTS
ATLANTA RD
CUMBERLAND PARKWAY
WINCHESTER PKWY
PROPOSED I-285 @ ATLANTA ROAD BRIDGE


I-285 @ ATLANTA ROAD
INTERCHANGE RECONSTRUCTION
ALTERNATE 2 - PREFERRED ALTERNATE
TANGENT SECTION (A-A)
ATLANTA ROAD
BRIDGE SECTION
ATLANTA ROAD
ORCHARD RD
PACKS FERRY RD