

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 0000531, Fulton County **OFFICE** Preconstruction
HPP-0000-00(531)
Bethany Road at Providence Road Roundabout **DATE** August 28, 2006
FROM  Genetha Rice-Singleton, Assistant Director of Preconstruction
TO  SEE DISTRIBUTION

SUBJECT APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

GRS/cj

Attachment

DISTRIBUTION:

Brian Summers
Harvey Keeper
Ken Thompson
Jamie Simpson
Michael Henry
Keith Golden
Joe Palladi (file copy)
Paul Liles
Babs Abubakari
Bryant Poole
BOARD MEMBER

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: P. I. No. 0000531, Fulton County **OFFICE** Preconstruction
 HPP-0000-00(531)
 Bethany Road at Providence Road Roundabout **DATE** August 17, 2006

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

TO *DC* David E. Studstill, Jr., P.E., Chief Engineer

SUBJECT PROJECT CONCEPT REPORT

This project is the intersection improvement to Bethany Road at Providence Road in Fulton County. The improvement includes the creation of a roundabout. Bethany Road and Providence Road are currently two lane facilities with no turn lanes at the intersection, and narrow shoulders. The posted speed limit on Bethany Road and Providence Road is 45 MPH. The construction of the roundabout will result in minimal right-of-way acquisition and provide satisfactory results through the next 10 years. Due to the limited use of roundabouts in the United States, performance measures are currently limited to volume to capacity ratios which were used to compare the performance of the proposed roundabout to other traffic control measures.

The roundabout will include a single travel lane and a truck apron separated by a mountable curb on the inside of the lane. The roundabout includes a curb and gutter section on the outside of the roundabout and a sidewalk separated by a planting strip. All section approach legs are tangent. Approach legs have a concrete median with a striped middle island, curb and gutter, and a sidewalk separated by a planting strip.

Environmental concerns include requiring a Categorical Exclusion be prepared; a public information open house has been held; time saving procedures are appropriate.

The estimated costs for this project are:

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>FUNDING</u>	<u>PROG DATE</u>
Construction (includes E&C and inflation)	\$1,397,000	\$900,000	Q92	2009
Right-of-Way & Utilities*	Local	Local		

*Fulton County signed PMA on 2-25-04 for PE, right-of-way, and utilities/DOT reimburse 80% PE.

David Studstill

Page 2

P. I. No. 0000531, Fulton

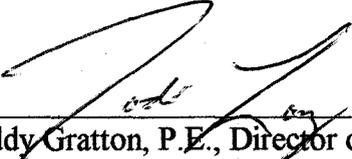
August 17, 2006

I recommend this project concept be approved.

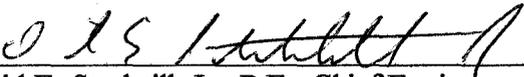
MBP:JDQ/cj

Attachment

CONCUR


Buddy Gratton, P.E., Director of Preconstruction

APPROVE


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

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE: HPP-0000-00(531) Fulton
P.I. No. 0000531
Bethany Rd. @ Providence Rd.

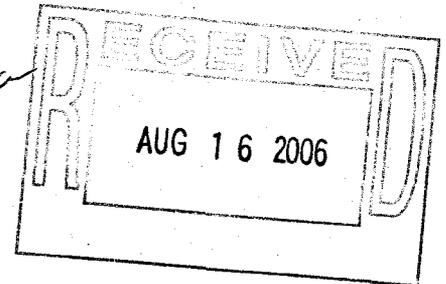
OFFICE: Engineering Services

DATE: August 15, 2006

FROM: Brian K. Summers, P.E., Project Review Engineer *REW*

TO: Meg Pirkle, P.E., Assistant Director of Preconstruction

SUBJECT: CONCEPT REPORT



We have reviewed the Concept Report submitted August 10, 2006, and have no comments.

The costs for this project are:

Construction	\$1,096,807
Inflation	\$172,884
E & C	\$126,970
Reimbursable Utilities	\$50,000 (Locals)
Right of Way	\$132,048 (Locals)

REW

c: Bryant Poole, Attn.: Mike Lobdell

SCORING RESULTS AS PER MOG 2440-2

Project Number: HPP-0000-00(531)		County: Fulton		PI No.: 0000531	
Report Date: August 10, 2006		Concept By: DOT Office: District 7			
<input checked="" type="checkbox"/> Concept Stage		Consultant: US Infrastructure, Inc.			
Project Type: Choose One From Each Column		<input type="checkbox"/> Major	<input checked="" type="checkbox"/> Urban	<input type="checkbox"/> ATMS	<input type="checkbox"/> Bridge Replacement
		<input checked="" type="checkbox"/> Minor	<input type="checkbox"/> Rural	<input type="checkbox"/> Building	<input type="checkbox"/> Interchange Reconstruction
				<input checked="" type="checkbox"/> Intersection Improvement	<input type="checkbox"/> Interstate
				<input type="checkbox"/> New Location	<input type="checkbox"/> Widening & Reconstruction
				<input type="checkbox"/> Miscellaneous	
FOCUS AREAS	SCORE	RESULTS			
Presentation	100				
Judgement	100				
Environmental	100				
Right of Way	100				
Utility	100				
Constructability	100				
Schedule	100				

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

Bethany Road (CR 61) at Providence Road (CR 27)

Project Number: HPP-0000-00(531)

County: Fulton

P. I. Number: 0000531

Federal Route Number: N/A

State Route Number: N/A

Recommendation for approval:

DATE 8/9/06

Mike L. Ladd
Project Manager

DATE 8/10/06

Ben Hood
District Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

Office of Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE 8-14-06

Keith Gold
State Traffic Safety & Design Engineer

DATE _____

Project Review Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

Bethany Road (CR 61) at Providence Road (CR 27)

Project Number: HPP-0000-00(531)

County: Fulton

P. I. Number: 0000531

Federal Route Number: N/A

State Route Number: N/A

Recommendation for approval:

DATE 8/9/06

Mike L. Allen
Project Manager

DATE 8/10/06

Bay Hood
District Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

Office of Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety & Design Engineer

DATE 8/15/06

Bruce R. Summers
Project Review Engineer

Project Concept Report page 22
Project Number: HPP-0000-00(531)
P. I. Number: 0000531
County: Fulton

NOTICE OF LOCATION AND DESIGN APPROVAL

Project No. HPP-0000-00(531) – Fulton County
P.I. Number 0000531

Notice is hereby given in compliance with Georgia code 22-2-109 that the Georgia Department of Transportation has approved the Location and Design of this project.

The date of location approval is AUGUST 28, 2006

The project consists of improvements of Providence Road @ Bethany Road, located in Fulton County, 2nd district, Land Lots 888, 889, 912, & 913.

The improvement project includes intersection improvements including possible signalization at the intersection of Providence Road and Bethany Road. Also, a roundabout implementation is under consideration.

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

Jeff Woodward
Area Engineer
jeff.woodward@dot.state.ga.us
862 Barnes Mill Road
Marietta, Georgia 30062
(770) 528-3238

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

Mike Lobdell
District Preconstruction Engineer
mike.lobdell@dot.state.ga.us
5025 New Peachtree, N.E.
Chamblee, Georgia 30341
(404) 463-4947

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

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE HPP-000-00(531) Fulton County OFFICE D7 Chamblee
Bethany Rd. @ Providence Rd.
P.I# 0000531 DATE August 9, 2006

FROM Bryant Poole, District Engineer

TO Meg Pirkle, Assistant Director of Preconstruction

SUBJECT **Project Concept Report**

Attached is the original copy of the Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

If you have any questions please call Mike Lobdell at (404) 463-4947.

Distribution:

cc: Brian Summers, Project Review Engineer
Harvey Keeper, State Environmental / Location Engineer
Keith Golden, State Traffic Safety & Design Engineer
Joseph Palladi, State Transportation Planning Administrator
Jamie Simpson, Office of Financial Management Administrator
File

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

PROJECT CONCEPT REPORT

Bethany Road (CR 61) at Providence Road (CR 27)

Project Number: HPP-0000-00(531)

County: Fulton

P. I. Number: 0000531

Federal Route Number: N/A

State Route Number: N/A

Recommendation for approval:

DATE 8/9/06

Mike Ladd
Project Manager

DATE 8/10/06

Greg Hood
District Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

Office of Financial Management Administrator

DATE _____

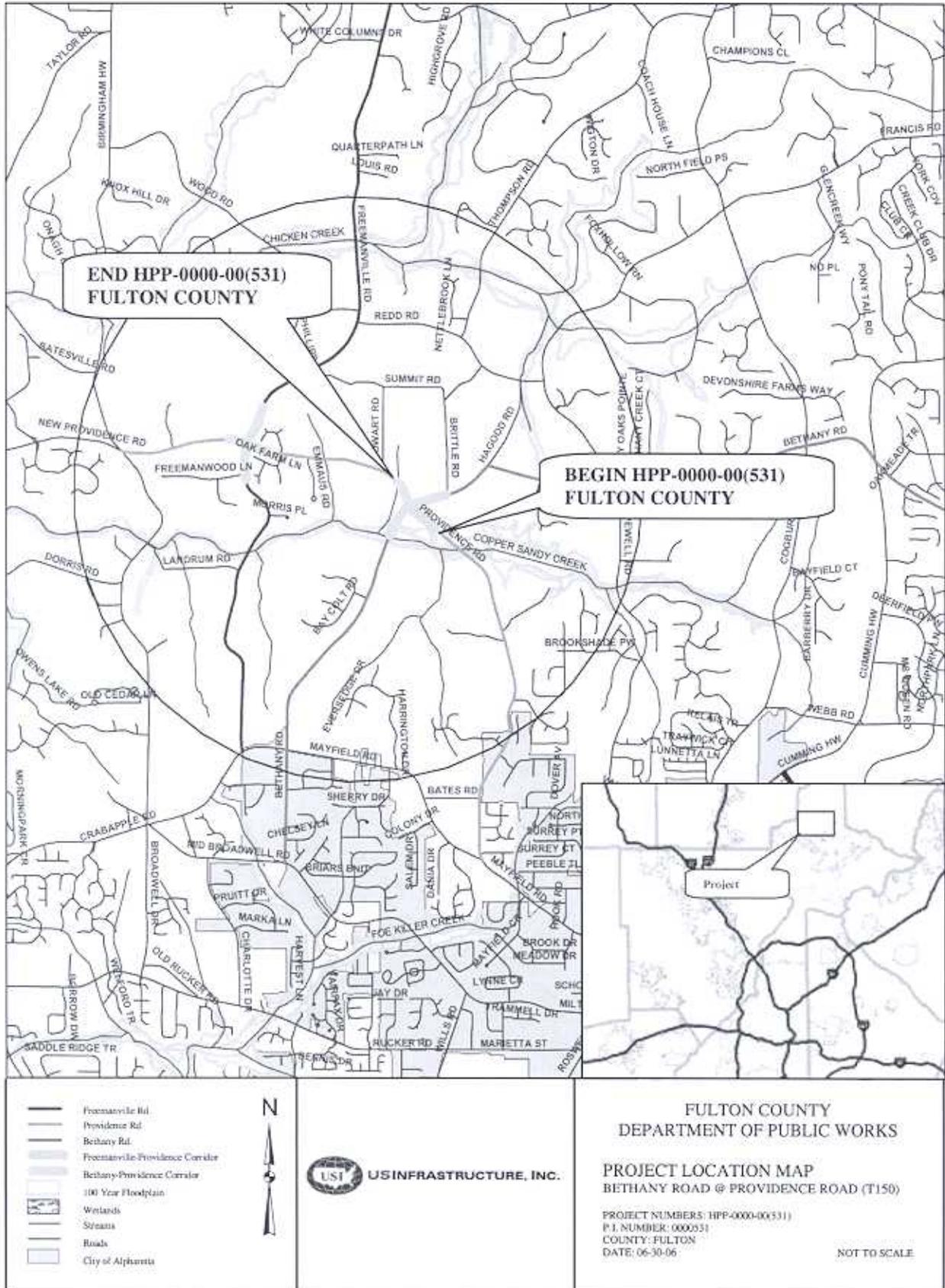
State Environmental/Location Engineer

DATE _____

State Traffic Safety & Design Engineer

DATE _____

Project Review Engineer



Need and Purpose: The purpose of this high priority project (HPP) is to improve the operation of the Bethany Road and Providence Road intersection. Traffic projections for the intersection indicate substantial growth and the need for operational upgrades. Surrounding land use is primarily residential. This project is adjacent to the Fulton County intersection improvement project Freemanville Road @ Providence Road (T153), GDOT Project No. HPP-0000-00(526), P.I. No. 0000526. The termini for the project have been selected to ensure adequate corridor length along all legs of the intersection to complete required improvements and tie into the existing two-lane roadway. This project is designated under the Capital Improvements Program and the Fulton County Project No. is T150. The project is included in 'Mobility 2030', the Atlanta Regional Commission's (ARC) Regional Transportation Plan (RTP) for the Atlanta region, as well as the ARC's 2006 – 2011 Transportation Improvement Program (TIP).

This project will provide local and through traffic with a facility that will serve current and future travel demand and provide the public with an improved driving, and walking environment. Existing and proposed Volume to Capacity ratios are shown below in Table 1.

Table 1						
Volume to Capacity Ratio						
	2006 (no build)		2015 (no build)		2015 (with build)	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Bethany Road - Northbound	0.18	0.34	0.28	0.65	0.19	0.25
Bethany Road - Southbound	0.77	0.56	1.15	1.08	0.51	0.54
Providence Road - Eastbound	1.21	0.33	1.90	0.63	0.89	0.20
Providence Road - Westbound	0.18	0.41	0.28	0.78	0.16	0.35
Maximum v/c Ratio	1.21	0.56	1.90	1.08	0.89	0.54

A three-year history of accidents at this intersection is shown in Table 2. This provides the number of total accidents at this intersection, per type and per year between 2003 and 2005.

Table 2: Accident History for Providence road & Bethany Road						
Year	Type of Accident					Total
	Angle	Sideswipe	Rear End	Head On	Other	
2003	1	0	0	0	0	1
2004	0	1	0	0	0	1
2005	0	0	0	0	0	0
Total	1	1	0	0	0	2

Description of the proposed project: The project shall include operational upgrades under the North Fulton Intersection Improvements, Phase IV contract, which includes Bethany Road @ Providence Road (T150), GDOT Project No. HPP-0000-00(531), P.I. No. 0000531. The project is located in northwest Fulton County, near the Fulton County – Cherokee County line. The intersection will be realigned to the west, and the existing unsignalized all way stop controlled intersection will be replaced with an urban, single lane roundabout. The roundabout design minimizes right of way requirements at the intersection, and provides enhanced operational features for the traveling public. The roundabout section will include a single travel lane, and a truck apron separated by a mountable curb on the inside of the lane. The roundabout includes a curb and gutter section on the outside of the roundabout, and a sidewalk separated by a planting strip. All section approach legs are tangent. Approach legs have a concrete median, with a striped middle island, curb and gutter, and a sidewalk separated by a planting strip. The total project concept length along Bethany Road is 910', and the total concept length along Providence Road is 800'.

Is the project located in a Non-attainment area? X Yes No.
 Project conforms to what is currently programmed in 2006-2011 TIP.

PDP Classification: Major Minor X

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

Functional Classification: Urban Minor Arterial (Bethany Road), Urban Collector Street (Providence Road)

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

State Route Number(s): N/A

County Route Number(s): Providence Road= CR 27
 Bethany Road= CR 61

Traffic (AADT):

Table 3: AADTs							
Bethany Road				Providence Road			
Existing		Future		Existing		Future	
2009		2029		2009		2029	
NB	SB	NB	SB	WB	EB	WB	EB
3802	3978	8331	8715	1735	2262	3802	4956

Existing design features:

- **Typical Section:** Two 10' travel lanes in each direction. No existing curb & gutter or sidewalks.
- **Posted speed:** 45 mph
- **Minimum Radii :** 953.45'
- **Maximum grade:** 3.99%
- **Width of right of way:** 60' (Providence Road); 50' (Bethany Road)

- **Major structures:** N/A
- **Major interchanges or intersections along the project:** Bethany Rd & Providence Rd
- **Existing length of roadway segment for each county segment:** 100% of this project is located in Fulton County, totaling approximately 1200' of existing roadway.

Proposed Design Features: Roundabout Alternative

- **Proposed typical section(s):** Roundabout section: 18' travel lane, and a 10' truck apron separated by a mountable curb on the inside of the lane. The inscribed circle diameter is 140' while the central island diameter is 34'6". The roundabout includes a 2' curb and gutter section on the outside of the roundabout, with a 5' sidewalk separated by a 3' planting strip. Approach leg: All section approach legs are tangent, with two travel lanes varying in width from 12' to 18'. Approach legs have a concrete median, with a striped middle island, 2' feet of curb and gutter, and a 5' sidewalk separated by a 3' planting strip.
- **Proposed Design Speed Mainline:** 45 mph
- **Proposed Maximum grade driveway:** 11%
- **Proposed Maximum degree of curve & Minimum Radii:** 6°00'33" (953.45').
Maximum degree allowable: 8°3'.
- **Proposed Inscribed Circle Diameter:** 130'
- **Proposed Entry Width:** 18'
- **Proposed Entry Radii:** 45', 45', 100', 75'
- **Right of way**
 - **Width:** Bethany Road (maximum 70', minimum 50')
Providence Road (maximum 70', minimum 50').
 - **Easements:** Temporary (X), Permanent (), Utility (), Other ().
 - **Type of access control:** Full (), Partial (), By Permit (X), Other ().
 - **Number of parcels:** 20 **Number of displacements:**
 - Business: 0
 - Residences: 0
 - Mobile homes: 0
 - Other: 0
- **Structures:** N/A
- **Major intersections and interchanges:** Bethany Road at Providence Road intersection will be improved by incorporating an urban, single-lane roundabout design.
- **Traffic control during construction:** One-lane, two-way traffic may be required at times during construction, a flagman may be required for short durations throughout the project when necessary.
- **Design Exceptions to controlling criteria anticipated:**

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
HORIZONTAL ALIGNMENT:	()	()	(X)
ROADWAY WIDTH:	()	()	(X)
SHOULDER WIDTH:	()	()	(X)
VERTICAL GRADES:	()	()	(X)
CROSS SLOPES:	()	()	(X)

STOPPING SIGHT DISTANCE:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SUPERELEVATION RATES:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
HORIZONTAL CLEARANCE:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SPEED DESIGN:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VERTICAL CLEARANCE:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BRIDGE WIDTH:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BRIDGE STRUCTURAL CAPACITY:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- **Design Variances:** No variances are anticipated.
- **Environmental concerns:** Three invasive plant species have been identified within the project area. Care will be taken during the construction process to prevent or minimize the spread of these species.
- **Level of environmental analysis:**
 - Are Time Savings Procedures appropriate? Yes (X), No (),
 - Categorical exclusion (X), or
 - Environmental Assessment/Finding of No Significant Impact (FONSI) (), or
 - Environmental Impact Statement (EIS) ().
- **Utility Involvements:**
 - Water: Fulton County Public Works
 - Telephone: BellSouth
 - Power: Suwannee EMC
 - Gas: AGL
 - Cable: Level 3 Communications, Comcast

Project responsibilities:

- Design – Fulton County & USI (Consultant)
- Right of Way Acquisition – Fulton County
- Relocation of Utilities – Fulton County
- Letting to contract – Georgia Department Of Transportation
- Supervision of construction – Georgia Department Of Transportation
- Providing material pits – Contractor
- Providing detours – Contractor

Coordination

- A meeting to discuss the concept was held with Fulton County on June 29th, 2005, and September 8th, 2005. Representatives for the consultant USI were present, as well as Sponsor representatives. Discussions were held regarding design parameters, anticipated Right-of-Way requirements, and a draft Concept Plan, Profile and Typical Section were presented for discussion.
- An informal concept discussion was held on February 17th, 2006, with representatives from GDOT, the Sponsor, and the consultant USI attending. The two main design alternates of the signalized intersection and the roundabout were discussed. GDOT representatives expressed tentative concurrence with the satisfactory nature of the roundabout design.

- Concept meeting date: Initial Concept Team Meeting was held on 05/17/06, with representatives from GDOT and the Sponsor. Comments from that meeting have been incorporated into this document.
- P. A. R. meetings, dates and results: None
- FEMA, USCG, and/or TVA: None
- Public involvement: Public Information Open House was held at Shakerag Elementary School on November 10th, 2005. Some residents raised concerns about the selection of a roundabout as the alternate; potential landscaping losses; the possibility of speed and traffic increases through the intersection; and the perceived lack of need to perform improvements at this point. Project representatives explained that the roundabout alternate meets traffic requirements for the next ten years, and requires less right-of-way than a signalized intersection improvement project; landscaping losses will be minimized and will be negotiated with property owners during right-of-way discussions; a roundabout design will keep speeds low through the intersection, and while traffic increases are inevitable in this part of the County, the improved intersection will help to accommodate the additional traffic; and that traffic analysis indicates that improvements to the intersection are warranted now.
- Other Coordination: Another current project in the area is the intersection improvement of Freemanville Road at Providence Road. PI Number 0000526; Project Number: HPP-0000-00(526). USI is also the Design Consultant for this project, and Fulton County is the Sponsor. Utility questionnaires have been distributed to 20 utility owners. Ten utilities have responded to date, and two of these have facilities on the project.

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: 5 Months.
- Time to complete preliminary construction plans: 6 Months.
- Time to complete right of way plans: 4 Months.
- Time to complete the Section 404 Permit: N/A.
- Time to complete final construction plans: 7 Months.
- Time to complete to purchase right of way: 12 Months.

Other alternates considered:

Signalized Intersection Improvements:

Signalized intersection improvements were considered, including adding dedicated left and right turn lanes on all legs of the intersection, as well as the addition of the signal. While this design will meet Level of Service (LOS) requirements through 2026, this alternate requires excessive right-of-way, and has significant adverse impacts on adjacent properties. This alternate is not popular with the local residents who attended the PIOH and voiced an opinion.

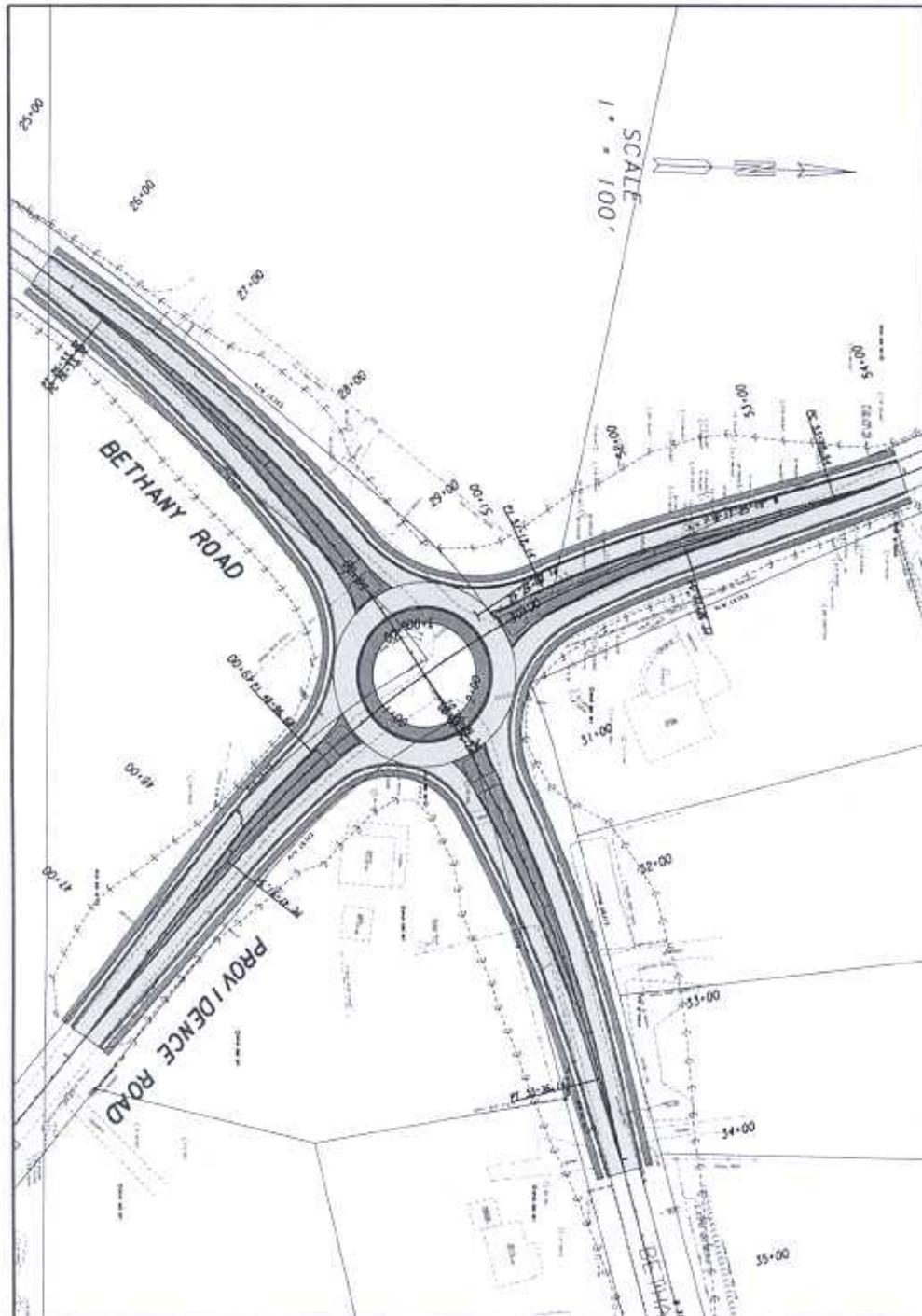
No Build Alternate:

This alternative does not address the operational needs of the intersection. The intersection will fail to meet LOS criteria in 2006.

Project Concept Report page 8
Project Number: HPP-0000-00(531)
P. I. Number: 0000531
County: Fulton

Attachments:

1. Concept Plan,
2. Concept Team Meeting Minutes,
3. Cost Estimates:
 - a. Construction including E&C,
 - b. Right of Way, and
 - c. Utilities
4. Typical sections,
5. Traffic analysis,
6. Location and Design Notice (On Minor Projects).



Memo

To: Chris Kingsbury FTC
From: Carson Spencer USI *CS*
cc: Antonio Valenzuela Fulton County Chris Woods GDOT
Scott Lee GDOT Scott Zehngraff GDOT
Zanda Montgomery GDOT Ken Werho GDOT
Harry Graham GDOT Michael Coleman GDOT
Wayne Gault USI Carol Bowler FTC
Date: 5/17/06
Re: Bethany Road At Providence Road Intersection Improvements (T150) – Initial Concept Team Meeting Minutes: 5/17/06

At Mr. Chris Woods' direction, Mr. Carson Spencer opened the meeting (which followed immediately after the Initial Concept Team Meeting for T153) by presenting the Concept Plan. Discussion of the Plan and Report followed. A summary of the actions resulting from this review are documented below. These are actions for USInfrastructure, Inc. (USI) to take unless otherwise indicated:

Actions from the review of the Concept Plan:

- 1) Adjust the roundabout typical section to show the FHWA recommended 2" mountable curb as appropriate
- 2) Remove the note on the roundabout typical section indicating a mountable curb at the inside of the truck apron adjacent to the center of the roundabout island

Actions from the review of the Concept Report:

- 1) Cover: Change spacing and font size to provide adequate room for signatures
- 2) Cover: Show County Route Numbers
- 3) Location Map (Page 2): Show reduced scale version of Atlanta metro area with interstates in blowup box
- 4) Need and Purpose (Page 3): Include brief description of surrounding land use (e.g. residential, commercial, etc.)
- 5) Need and Purpose (Page 3): Remove reference to safety improvements
- 6) Need and Purpose (Page 3): Indicate that accident data is for three years
- 7) Description (Page 4): Remove design details
- 8) Page 4 Change TIP reference to 2006-2011
- 9) Traffic (Page 4): Change to 2009 through 2029
- 10) Right of Way (Page 5): Revise widths to show minimum and maximum values
- 11) Page 6: Show CE, FONSI, and EIS as part of the same item, with CE as appropriate selection
- 12) Scheduling (Page 7): Adjust 'Time to complete to purchase right of way' to 12 months
- 13) Cost Estimate (Page 8): Use 'Item Mean Index' and engineering judgment to adjust HMA and Grading Complete costing
- 14) Attachment: Provide an 8.5" by 11" .pdf attachment showing the Concept Plan

Mr. Scott Zehngraff asked when the roundabout would fail without the bypass lane. Mr. Spencer indicated that the roundabout was predicted to fail in 2013 without the bypass, two years prior to the predicted 2015 failure with the proposed configuration. Mr. Zehngraff indicated that, while he wasn't requiring or requesting a change to the concept design, he questioned whether the intersection would actually fail as soon as predicted if the bypass lane were excluded. He pointed out that the morning peak hour is the only timeframe for this intersection that approaches the volumes necessary to create a failure condition.

Additional discussion centered on the potential need for additional right of way on Providence to replace a displaced fence. It was agreed that this issue could be revisited during design as necessary.

Mr. Scott Lee questioned if either road had been designated for bike lanes. Mr. Spencer indicated that he would investigate.

Additional discussion centered on the possibility of making the roundabout design more signal-friendly should a conversion prove necessary. GDOT staff noted that, could the proposed intersection configuration be modified to reduce the acute skew angles on some of the approaches, this would simplify and reduce the expense of the conversion process, should this prove necessary, while improving the functionality of the intersection by improving turning movements. Mr. Woods noted that, based on the Concept Cost Estimate, there are additional funds available for right of way acquisition and construction should adjustments prove possible and desirable.

At the conclusion of these intersection configuration discussions, the County agreed to internally review the feasibility of shifting the roundabout alignment to improve the acute skew angle approaches.



MEETING/CONFERENCE RECORD OF ATTENDEES

Purpose: Concept Meeting – Providence Rd at Bethany and Freemanville Rd, Fulton County

Location: District Seven Preconstruction Conference Room

Date: May 17, 2006 **Hour:** 1:30 PM **Moderator:** Chris Woods

<u>Name</u>	<u>Organization</u>	<u>Telephone</u>	<u>Email Address</u>
1. Mike Lobdell	GDOT	404-463-4947	mike.lobdell@dot.state.ga.us
✓ 2. SCOTT LEE	GDOT	" " "	SCOTT.LEE@DOT.STATE.GA.US
3. Wayne Gault	USI	770-640-6652	gaultw@usieng.com
✓ 4. Canon Spencer	USI	770-640-6652	spencerc@usieng.com
✓ 5. CHRIS KINGSBURY	MA/FC	7.263.5945	ckingsbury@maoi.net
✓ 6. Ken Kerho	DOT	4-635-8144	Ken.Kerho@DOT.STATE.GA.US
✓ 7. SCOTT ZEHNGRAFF	DOT	4-635-8127	Scott.zehngraff@... " " " "
✓ 8. Zanda Montgomery	GDOT	4-463-4947	zanda.montgomery@dot...
✓ 9. Chris Woods	GDOT	4/463 4947	Chris.Woods@dot.state.ga.us
✓ 10. Harry Graham	GDOT	4/463-4961	harry.graham@dot.state.ga.us
✓ 11. Michael Coleman	GDOT	4-463-4947	mike.COLEMAN " "
✓ 12. Antonio Valenzuela			
13.			
14.			
15.			
16.			
17.			
18.			

Project Concept Report page 13
 Project Number: HPP-0000-00(531)
 P. I. Number: 0000531
 County: Fulton

PRELIMINARY COST ESTIMATE

PROJECT NUMBER: HPP-0000-00(531)

COUNTY: FULTON

DATE: July 2006

ESTIMATED LETTING DATE: 2008

PREPARED BY: USInfrastructure, Inc.

PROJECT LENGTH (MILES): 0.11 (Bethany Road),
 0.11 (Providence Road)

() PROGRAMMING PROCESS (X) CONCEPT DEVELOPMENT () DURING PROJECT DEV.

ESTIMATE SUMMARY		
A. RIGHT-OF-WAY	\$	132,048
B. REIMBURSEMENT UTILITIES	\$	50,000
C. CONSTRUCTION		
1. MAJOR STRUCTURES	\$	0
2. GRADING AND DRAINAGE	\$	422,709
3. BASE AND PAVING	\$	564,600
4. LUMP ITEMS	\$	100,000
5. MISCELLANEOUS	\$	9,498
6. SPECIAL FEATURES	\$	0
SUBTOTAL CONSTRUCTION COST	\$	1,096,807
E. & C. (10%)	\$	109,681
INFLATION (5% PER YEAR)	\$	0
NUMBER OF YEARS: 0		
TOTAL CONSTRUCTION COST	\$	1,206,488
GRAND TOTAL PROJECT COST	\$	1,388,536

Cost Estimate

Name	Bethany Road @ Providence Road Intersection Improvement		
PI_No	0000531		
Title	Bethany Alt R Urban Concept Cost Est		

<i>Item</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price Description</i>	<i>Cost</i>
162-1300	3.00	EA	2000.00 EROSION CONTROL CHECK DAM, TP	6000.00
163-0232	1.00	AC	500.00 TEMPORARY GRASSING	500.00
163-0240	6.00	TN	200.00 MULCH	1200.00
163-0300	2.00	EA	1100.00 CONSTRUCTION EXIT	2200.00
163-0531	1.00	EA	7623.23 CONSTRUCT AND REMOVE SEDIMENT BASIN, TP 1, STA NO	7623.23
163-0550	16.00	EA	230.00 CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	3680.00
165-0010	3000.00	LF	1.50 MAINTENANCE OF TEMPORARY SILT FENCE, TP A	4500.00
165-0101	2.00	EA	400.00 MAINTENANCE OF CONSTRUCTION EXIT	800.00
167-1000	6.00	EA	2000.00 WATER QUALITY MONITORING AND SAMPLING	12000.00
171-0010	950.00	LF	2.00 TEMPORARY SILT FENCE, TYPE A	1900.00
201-1500	1.00	LS	100000.00 CLEARING & GRUBBING	100000.00
210-0100	1.00	LS	100000.00 GRADING COMPLETE	100000.00
441-4020	210.00	SY	30.00 CONC VALLEY GUTTER, 6 IN	6300.00
441-6012	3900.00	LF	20.00 CONC CURB & GUTTER, 6 IN X 24 IN, TP 2	78000.00

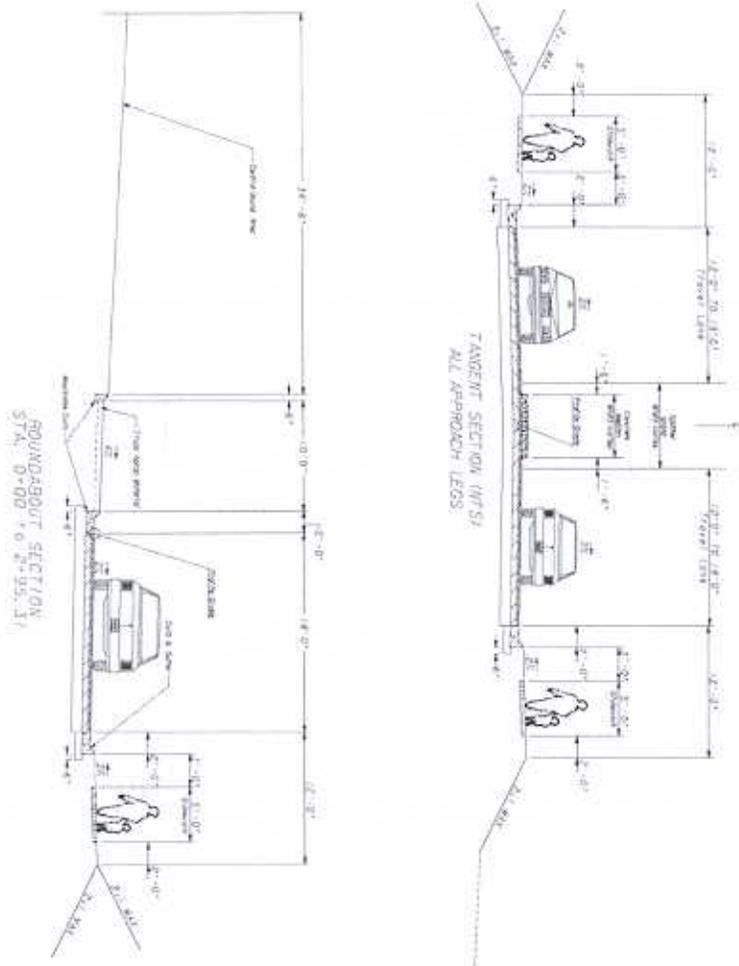
550-1180	1510.00	LF	35.00	STORM DRAIN PIPE, 18 IN, H 1-10	52850.00
650-4118	5.00	EA	300.00	FLARED END SECTION 18 IN, SIDE DRAIN	1500.00
668-1100	13.00	EA	2000.00	CATCH BASIN, GP 1	26000.00
688-2100	3.00	EA	3000.00	DROP INLET, GP 1	9000.00
700-6910	2.75	AC	900.00	PERMANENT GRASSING	2475.00
700-7010	5.00	GL	20.00	LIQUID LIME	100.00
700-8000	3.00	TN	300.00	FERTILIZER MIXED GRADE	900.00
702-9020	60.00	SY	3.00	MULCH	180.00
708-1000	200.00	CY	25.00	PLANT TOPSOIL	5000.00
				TOTAL:2. GRADING AND DRAINAG	422708.23

Category: 3. BASE AND PAVING					
<i>Item</i>	<i>Quantity</i>	<i>Unit</i>	<i>Unit Price</i>	<i>Description</i>	<i>Cost</i>
310-1101	4300.00	TN	20.00	GR AGGR BASE CRS, INCL MATL	86000.00
318-3000	100.00	TN	20.00	AGGR SURF CRS	2000.00
402-3121	1100.00	TN	155.00	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL	170500.00
402-3131	500.00	TN	128.00	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, GP 2 ONLY, INC	64000.00
402-3190	800.00	TN	152.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL	121600.00
441-0104	2200.00	SY	40.00	CONC SIDEWALK, 4 IN	88000.00
441-0748	500.00	SY	30.00	CONCRETE MEDIAN, 6 IN	15000.00
900-0039	2500.00	SF	7.00	BRICK PAVERS	17500.00
				TOTAL:3. BASE AND PAVING	564600

4. LUMP ITEMS				Cost
Item	Quantity	Unit	Unit Price Description	
150-1010	1.00	LS	40000.00 TRAFFIC CONTROL	40000.00
CON-LA	1.00	LS	20000.00 LANDSCAPING (CONCEPT COST ESTIMATE)	20000.00
XLT-LIG	1.00	LS	40000.00 LIGHTING (CONCEPT COST ESTIMATE)	40000.00
TOTAL:4. LUMP ITEMS				100000

5. MISCELLANEOUS				Cost
Item	Quantity	Unit	Unit Price Description	
158-1000	1000.00	HR	0.80 TRAINING HOURS	800.00
634-1200	16.00	EA	100.00 RIGHT OF WAY MARKERS	1600.00
636-1014	150.00	SF	15.00 HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 1	2250.00
636-2070	240.00	LF	8.00 GALV STEEL POSTS, TP 7	1920.00
653-0210	4.00	EA	100.00 THERMOPLASTIC PVMT MARKING, WORD, TP 1	400.00
653-1502	4000.00	LF	0.30 THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	1200.00
653-1806	160.00	LF	0.00 THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, YELLOW	0.00
653-3810	160.00	GLF	0.80 THERMOPLASTIC SKIP TRAF STRIPE, 10 IN, WHITE	128.00
654-1001	200.00	EA	4.00 RAISED PVMT MARKERS TP 1	800.00
654-1003	100.00	EA	4.00 RAISED PVMT MARKERS TP 3	400.00
TOTAL:5. MISCELLANEOUS				9498

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Bethany Rd / Providence Rd Intersection Analysis Existing/Future Conditions Level of Service Analysis

2006 No Build Unsignalized		AM Peak Hour					PM Peak Hour				
Roadway	Approach Direction	Turn Movement	Volume	v/c ratio	Control Delay	LOS	Volume	v/c ratio	Control Delay	LOS	
Bethany Road	NB	LT	12	0.18	11.7sec	B	44	0.34	12	B	
		THRU	69				133				
		RT	4				9				
	SB	LT	21	0.77	27.0sec	D	14	0.56	14.7	B	
		THRU	288				72				
		RT	108				268				
Providence Road	WB	LT	6	0.18	11.4sec	B	25	0.41	13.1	B	
		THRU	67				190				
		RT	14				15				
	EB	LT	324	1.21	128.5sec	F	88	0.33	12.1	B	
		THRU	218				68				
		RT	133				21				
AM:		Max v/c ratio: 1.21		Int Delay: 79.1sec		Int LOS: F					
PM:		Max v/c ratio: 0.56		Int Delay: 13.3sec		Int LOS: B					

2011 No Build Unsignalized		AM Peak Hour					PM Peak Hour				
Roadway	Approach Direction	Turn Movement	Volume	v/c ratio	Control Delay	LOS	Volume	v/c ratio	Control Delay	LOS	
Bethany Road	NB	LT	14	0.23	12.9sec	B	54	0.48	16.3sec	C	
		THRU	84				161				
		RT	4				11				
	SB	LT	26	0.96	54.2sec	F	17	0.79	28.1sec	D	
		THRU	350				88				
		RT	131				326				
Providence Road	WB	LT	7	0.24	12.8sec	B	31	0.59	19.3sec	C	
		THRU	81				231				
		RT	17				18				
	EB	LT	394	1.6	294.1sec	F	107	0.47	16.4sec	C	
		THRU	265				83				
		RT	161				26				
AM:		Max v/c ratio: 1.60		Int Delay: 176.8sec		Int LOS: F					
PM:		Max v/c ratio: 0.79		Int Delay: 21.5sec		Int LOS: C					

2014 No Build Unsignalized			AM Peak Hour				PM Peak Hour			
Roadway	Approach Direction	Turn Movement	Volume	v/c ratio	Control Delay	LOS	Volume	v/c ratio	Control Delay	LOS
Bethany Road	NB	LT	16	0.27	13.5sec	B	60	0.61	22.8sec	C
		THRU	94				181			
		RT	5				12			
	SB	LT	29	1.1	93.5sec	F	19	1.02	69.8sec	F
		THRU	393				99			
		RT	147				366			
Providence Road	WB	LT	8	0.27	13.5sec	B	35	0.74	29.8sec	D
		THRU	92				260			
		RT	19				20			
	EB	LT	443	1.82	392.8sec	F	120	0.59	22.3sec	C
		THRU	298				93			
		RT	181				29			
AM:		Max v/c ratio: 1.82		Int Delay: 242.6sec		Int LOS: F				
PM:		Max v/c ratio: 1.02		Int Delay: 42.0sec		Int LOS: E				

2015 No Build Unsignalized			AM Peak Hour				PM Peak Hour			
Roadway	Approach Direction	Turn Movement	Volume	v/c ratio	Control Delay	LOS	Volume	v/c ratio	Control Delay	LOS
Bethany Road	NB	LT	17	0.28	13.8sec	B	63	0.65	24.8sec	C
		THRU	98				188			
		RT	5				12			
	SB	LT	30	1.15	111.4sec	F	20	1.08	90.8sec	F
		THRU	409				103			
		RT	153				381			
Providence Road	WB	LT	8	0.28	13.7sec	B	36	0.78	33.6sec	D
		THRU	95				270			
		RT	20				21			
	EB	LT	461	1.9	430.0sec	F	125	0.63	24.2sec	C
		THRU	310				97			
		RT	188				30			
AM:		Max v/c ratio: 1.90		Int Delay: 268.5sec		Int LOS: F				
PM:		Max v/c: 1.08		Int Delay: 51.5sec		Int LOS: F				

2006 Roundabout			AM Peak Hour					PM Peak Hour				
Roadway	Approach Direction	Turn Movement	Volume	v/c ratio	Stopped Delay	Control Delay	L O S	Volume	v/c ratio	Stopped Delay	Control Delay	L O S
Bethany Road	NB	LT	12	0.11	1.4	1.82	A	44	0.17	0.6	0.78	A
		THRU	69					133				
		RT	4					9				
	SB	LT	21	0.35	0.5	0.65	A	14	0.35	1.3	1.69	A
		THRU	288					72				
		RT	108					268				
Providence Road	WB	LT	6	0.1	1.4	1.82	A	25	0.23	0.8	1.04	A
		THRU	67					190				
		RT	14					15				
	EB	LT	324	0.56	2.5	3.25	A	88	0.13	0.5	0.65	A
		THRU	218					68				
		RT	133					21				
Max v/c ratio			0.56					0.35				

2011 Roundabout			AM Peak Hour					PM Peak Hour				
Roadway	Approach Direction	Turn Movement	Volume	v/c ratio	Stopped Delay	Control Delay	L O S	Volume	v/c ratio	Stopped Delay	Control Delay	L O S
Bethany Road	NB	LT	14	0.14	3.2	4.16	A	54	0.21	0.5	0.65	A
		THRU	84					161				
		RT	4					11				
	SB	LT	26	0.43	0.5	0.65	A	17	0.44	1.4	1.82	A
		THRU	350					88				
		RT	131					326				
Providence Road	WB	LT	7	0.13	2.1	2.73	A	31	0.29	1.4	1.82	A
		THRU	81					231				
		RT	17					18				
	EB	LT	394	0.72	7.3	9.49	A	107	0.17	0.6	0.78	A
		THRU	265					83				
		RT	161					26				
Max v/c ratio			0.72					0.44				

2014 Roundabout			AM Peak Hour					PM Peak Hour				
Roadway	Approach Direction	Turn Movement	Volume	v/c ratio	Stopped Delay	Control Delay	L O S	Volume	v/c ratio	Stopped Delay	Control Delay	L O S
Bethany Road	NB	LT	16	0.18	2	2.6	A	60	0.24	0.9	1.17	A
		THRU	94					181				
		RT	5					12				
	SB	LT	29	0.49	0.7	0.91	A	19	0.51	2.1	2.73	A
		THRU	393					99				
		RT	147					366				
Providence Road	WB	LT	8	0.15	1.3	1.69	A	35	0.34	1.5	1.95	A
		THRU	92					260				
		RT	19					20				
	EB	LT	443	0.84	14.3	18.59	C	120	0.19	0.8	1.04	A
		THRU	298					93				
		RT	181					29				
Max v/c ratio			0.84					0.51				

2015 Roundabout			AM Peak Hour					PM Peak Hour				
Roadway	Approach Direction	Turn Movement	Volume	v/c ratio	Stopped Delay	Control Delay	L O S	Volume	v/c ratio	Stopped Delay	Control Delay	L O S
Bethany Road	NB	LT	17	0.19	2.4	3.12	A	63	0.25	1	1.3	A
		THRU	98					188				
		RT	5					12				
	SB	LT	30	0.51	0.9	1.17	A	20	0.54	1.9	2.47	A
		THRU	409					103				
		RT	153					381				
Providence Road	WB	LT	8	0.16	2	2.6	A	36	0.35	2.8	3.64	A
		THRU	95					270				
		RT	20					21				
	EB	LT	461	0.89	28.3	36.79	E	125	0.2	0.7	0.91	A
		THRU	310					97				
		RT	188					30				
Max v/c ratio			0.89					0.54				