

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: NHS-0001-00(917) Douglas
MSL-0004-00(427) Douglas
MSL-0004-00(428) Douglas
P. I. Nos.: 0001917, 0004427, & 0004428
I-20 @ Lee Road & CR 817/Lee Road Widening

OFFICE: Engineering Services

DATE: May 3, 2007

FROM:  Brian Summers, P.E., Project Review Engineer

TO: Bryant Poole, District Engineer, Chamblee

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. Incorporate alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT No.	Description	Savings PW & LCC	Implement	Comments
PHASE 1 (PH1) LEE ROAD/SWEETWATER ROAD WIDENING				
PH1-1	Provide access to the new fire station at the intersection of Groovers Lake Road and Linda Drive	-\$90,127 (Cost Increase)	No	This is going to be handled with an emergency signal and mountable median.
PH1-2	Eliminate the Linda Drive/South Sweetwater Road intersections and designate Linda Drive a Cul-de-sac	-\$9,146 (Cost Increase)	No	Would probably require a residential relocation which is not considered in the VE Cost Estimate.
PH1-6	Replace the multi-use trail on the east side of Lee Road with a Sidewalk	\$217,731	No	This multi-use trail is included in the County's Bike Plan.
PH1-7	Eliminate the Cooper Circle/South Sweetwater Road intersection and designate Cooper Circle a Cul-de-sac	-\$9,423 (Cost Increase)	No	Would result in a more circuitous access to South Sweetwater Road and would concentrate traffic through neighborhood streets.

ALT No.	Description	Savings PW & LCC	Implement	Comments
PHASE 1 (PH1) LEE ROAD/SWEETWATER ROAD WIDENING				
PH1-8	Eliminate the Inman Street/South Sweetwater Road intersection and designate Inman Street a Cul-de-sac	-\$21,389 (Cost Increase)	No	Would result in a more circuitous access to South Sweetwater Road and would concentrate traffic through neighborhood streets.
PH1-9	Eliminate the Houston Street/South Sweetwater Road intersection and designate Houston Street a Cul-de-sac	-\$11,987 (Cost Increase)	No	Would result in a more circuitous access to South Sweetwater Road and would concentrate traffic through neighborhood streets. There could also be a residential relocation which is not considered in the VE Cost Estimate.
PHASE 2 (PH2) CR 817/LEE ROAD WIDENING				
ALT No.	Description	Savings PW & LCC	Implement	Comments
PH2-2	Replace the multi-use trail on the east side of Lee Road with a sidewalk	\$115,084	No	This multi-use trail is included in the County's Bike Plan.
PH2-3	Extend the multi-use trail to serve the Sweetwater Creek Recreational Area and State Park along Cedar Terrace Road	-\$186,036 (Cost Increase)	No	This is being considered as part of another project in the future by Douglas County.
PH2-4	Eliminate the new connection between Old Chestnut Log Road and Lee Road	\$149,565	No	Would result in a more circuitous access to Lee Road and would concentrate traffic through neighborhood streets.
PH2-6	Extend the school bus turning lane between the Sweetwater Elementary School entrance and East County Line Road on Lee Road	-\$30,866 (Cost Increase)	Yes	This will be done.
PH2-9	Realign the driveway to the Marvelous Light Christian Ministries property	-\$27,397 (Cost Increase)	Yes	This will be done.
PH2-10	Eliminate the Maxwell Place/Lee Road intersection and designate Maxwell Place a Cul-de-sac	\$97,020	Yes	This will be done.
PH2-11	Do not construct the "New Road" as part of these projects	\$174,087	Yes	This road has already been constructed by the Developer.

ALT No.	Description	Savings PW & LCC	Implement	Comments
PHASE 2 (PH2) CR 817/LEE ROAD WIDENING				
PH2-12	Eliminate the Park Avenue/Lee Road intersection, extend Madison Place to the "New Road", and designate Park Avenue a Cul-de-sac	\$29,495	No	There are concerns with grade changes, sight distance problems, and local opposition.
INTERCHANGE RECONSTRUCTION (IR)				
IR-1	Cul-de-sac Sweetwater Industrial Drive/Lee Road intersection	\$98,507	Yes	This will be done.
IR-2	Allow westbound Monier Boulevard traffic to turn southbound onto Lee Road	-\$4,280 (Cost Increase)	No	There are operational concerns with this access being allowed since it is so close to the I-20/Lee Road interchange.
IR-4	Replace the multi-use trail on the east side of Lee Road with a sidewalk	\$160,141	No	This multi-use trail is included in the County's Bike Plan.
IR-6	Extend the Concrete Pavement to Monier Boulevard	\$117,564	Yes	This will be done.
IR-7	Eliminate the sidewalks on the bridge and provide a multi-use trail	-\$91,819 (Cost Increase)	No	This does not agree with current GDOT Guidelines.
IR-8	Adjust the cost estimate to more accurately reflect the cost of the new bridge	-\$1,403,924 (Cost Increase)	Yes	This will be done.
IR-9	Provide access to Brodick Hill Apartments from Vulcan Drive	-\$269,542 (Cost Increase)	No	The Developer is required to do this as part of the Permit.

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 459,782
 -996,742
 OK

A meeting was held on May 2, 2007 to discuss the above recommendations. Wayne Fedora with FHWA, Mike Lobdell, and Ralph Merrow, Jr. with District 7 Design, and Brian Summers, Ron Wishon and Lisa Myers with Engineering Services were in attendance.

Approved: David E. Studstill, Jr. Date: 5/3/07
 David E. Studstill, Jr., P. E., Chief Engineer

Approved: Rodney Barry Date: 5/14/07
 for Rodney Barry, P. E., FHWA Division Administrator

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VE Study Implementation
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BKS/REW

Attachments

c: Gus Shanine
Wayne Fedora
Mike Lobdell
Ralph Merrow
Lonnie Jones
Joe King
Zanda Montgomery
Michael Lankford
Ernay Robinson
Ken Werho
Lisa Myers

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA



INTERDEPARTMENTAL CORRESPONDENCE

FILE: NHS-0001-00(917), MSL-0004-00(427), and
MSL-0004-00(428) Douglas County
PI Nos. 0001917, 0004427, and 0004428
Lee Road Widening

OFFICE: District Seven
Chamblee

DATE: 3/30/2007

BP
FROM: Bryant Poole, Metro District Engineer

TO: Brian Summers, P.E., Project Review Engineer

Subject: Responses to Value Engineering Study

The District Seven Preconstruction Office met with Douglas County and the design consultants designing the subject projects to discuss the recommendations from the Value Engineering Study. Below are the comments received in italics and our responses.

0004427 Phase 1 (PH1) Lee/Sweetwater Roads Widening

Provide access to the new fire station at the intersection of Groovers Lake Road and Linda Drive.

An emergency signal and a mountable median are planned from the Fire Station directly on to Sweetwater Rd. This should provide quicker egress for the Fire Department when responding to an emergency than the proposed configuration from the VE Study. The District recommends not implementing.

Eliminate the Linda Drive/South Sweetwater Road intersection and designate Linda Drive a cul-de-sac.

The proposed cul-de-sac would likely require that at least one of the property owners be relocated. As funds for the project are very limited and the proposed VE alternative offers very little safety benefits, the District recommends not implementing.

Replace the multi-use trail on the east side of Lee Road with a sidewalk.

This section of the multi-use trail is part of the statewide bike plan and part of a local plan to eventually connect the residential areas in the vicinity to a large state park. Total cost savings are about \$217,000. The District recommends not implementing.

Eliminate the Cooper Circle/South Sweetwater Road intersection and designate Cooper Circle a cul-de-sac.

This alternative leads to a slight increase in cost and an increase in emergency response time. The District recommends not implementing.

Eliminate the Inman Street/South Sweetwater Road intersection and designate Inman Street a cul-de-sac.

This alternative would concentrate traffic on the remaining neighborhood streets and reduce connectivity in the neighborhood. The safety and operational benefits are questionable. The District and the County recommend to not implement.

Eliminate the Houston Street/South Sweetwater Road intersection and designate Houston Street a cul-de-sac.

The design consultant will explore options to prevent left turning maneuvers. A right-in/right-out configuration would also improve safety and operations, the cul-de-sac would likely require a total take which would significantly increase costs.

0004428 Phase 2 (PH2) CR 817/Lee Road Widening Responses

Replace the multi-use trail on the east side of Lee Road with a sidewalk.

This section of the multi-use trail is part of the statewide bike plan and part of a local plan to eventually connect the residential areas in the vicinity to a large state park. Total cost savings are about \$115,000, but this estimate does not consider the need to add bike lanes to provide continuity to the state bike route. The District recommends not implementing.

Extend the multi-use trail to serve the Sweetwater Creek Recreational area and State Park along Cedar Terrace Road.

The County plans to explore the possibility of adding this multi-use trail as part of another project in the future. Currently, no funds are available. The District recommends not implementing.

Eliminate the new connection between Old Chestnut Log Road and Lee Road.

As presented, the option does not specify the improvements required on the residential network and therefore does not estimate the costs of the upgrades. The option would concentrate traffic onto other streets in the residential area.

Extend the school bus turning lane between the Sweetwater Elementary School entrance and East County Line Road on Lee Road.

The District and the County agree with this suggestion, the plans will be changed.

Realign the driveway to the Marvelous Light Christian Ministries property.
The County will pursue this option during Right of Way negotiations.

Eliminate the Maxwell Place/Lee Road intersection and designate Maxwell Place a cul-de-sac.

The District and the County agree with this option-will implement.

Do not construct the "New Road".

Developer has already constructed this road at no cost to the County.

Eliminate the Park Avenue/Lee Road intersection, extend Madison Place to the "New Road," and designate Park Avenue a cul-de-sac.

This option was considered during the permitting of the "New Road". The connection was rejected because of grade problems, sight distance problems, and local opposition. The District does not recommend implementing because of the impacts and cost increase that would result.

0001917 I-20/Lee Road Interchange Reconstruction Responses

Cul-de-sac Sweetwater Industrial Drive/Lee Road intersection.

The District and the County agree with this option-will implement.

Allow westbound Monier Boulevard traffic to turn southbound onto Lee Road.

This option was discussed at length during the Concept Team Meeting with FHWA. Because of concerns with operations and safety with a full access intersection so close to interstate ramps, the attendees of the meeting felt it would be better to leave as is designed.

Replace the multi-use trail on the east side of Lee Road with a sidewalk.

This section of the multi-use trail is part of the statewide bike plan and part of a local plan to eventually connect the residential areas in the vicinity to a large state park. Total cost savings are about \$160,000, but this estimate does not consider the need to add bike lanes to provide continuity to the state bike route. The District recommends not implementing.

Extend the concrete pavement to Monier Boulevard.

The District and the County agree with this option-will implement.

Eliminate the sidewalks on the bridge and provide a multi-use trail.

Implementing this option would contradict Department Standard Operating Procedure by only providing pedestrian facilities on one side on the road. This option would be less safe since it would require a pedestrian crossing where one might not have otherwise be required. The District recommends not implementing.

Adjust the cost estimate to more accurately reflect the cost of the new bridge.

The District agrees and cost estimates will reflect the more realistic estimate.

Provide access to Brodick Hill Apartments from Vulcan Drive.

The apartment complex developer was required to provide access onto Vulcan Drive during construction so that the Lee Road Access could be cut off with this project-will implement.

We look forward to meeting with the Office of Engineering Service and FHWA in the near future to discuss the recommendations above. Please contact Mike Lobdell at (770) 986-1257 with any questions.

BRP:MAL