

D.O.T. 66

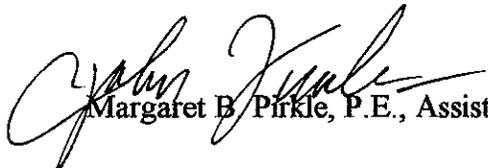
DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

**FILE** BRST-114-1(101) Paulding County  
P. I. No. 632920

**OFFICE** Preconstruction

**DATE** April 25, 2003

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

**TO** SEE DISTRIBUTION

**SUBJECT** PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

MBP/cj

Attachment

**DISTRIBUTION:**

David Mulling  
Harvey Keeper  
Jerry Hobbs  
Percy Middlebrooks  
Michael Henry  
Phillip Allen  
Marta Rosen  
Paul Liles  
Ben Buchan  
Kent Sager  
BOARD MEMBER

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**

**FILE** BRST-114-1(101) Paulding County **OFFICE** Preconstruction  
P.I. No. 632920

**DATE** April 9, 2003

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

**TO** Frank L. Danchetz, P.E., Chief Engineer

**SUBJECT PROJECT CONCEPT REPORT**

This project is the replacement of a structurally deficient bridge on SR 120 over the Silver Comet Trail, 1.1 miles southwest of Dallas, Georgia. The existing bridge, constructed in 1949, is load limited with a sufficiency rating of 43. State Route 120 at this location is a rural two lane roadway with 12' lanes with rural shoulders. This section of SR 120 is functionally classified as a rural minor arterial. Traffic is projected to be 6,500 VPD and 11,000 VPD in the years 2008 and 2028 respectively. The proposed speed and the design speed are 45 MPH.

The construction proposes to build a pedestrian bottomless arch culvert over the Silver Comet Trail at the existing bridge site. The proposed pedestrian culvert will be precast concrete, 20' wide and 20' high, consisting of one single arch shaped bottomless barrel with wing walls at both ends. The proposed travel lanes on SR 120 will consist of two, 12' lanes with 10' shoulders (2' paved). Traffic will be maintained on the existing bridge while the proposed culvert is constructed underneath the bridge. Traffic will then be detoured off-site while the existing bridge is demolished and the final roadway is constructed.

Environmental concerns include requiring a Categorical Exclusion will be prepared; a public hearing is not required; time saving procedures are appropriate.

The estimated costs for this project are:

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>PROG DATE</u>	<u>LET DATE</u>
Construction (includes E&C and inflation)	\$532,000	\$532,000	2007	2007
Right-of-Way	\$ 10,000	\$ 10,000		
Utilities*	\$ 15,000	----		

\*Paulding County refused LGPA for utilities 8-11-99.

Frank L. Danchetz

Page 2

BRST-114-1(101) Paulding

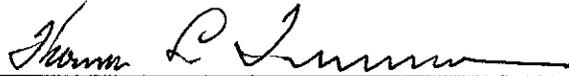
April 9, 2003

I recommend this project concept be approved.

MBP:JDQ/cj

Attachment

CONCUR



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

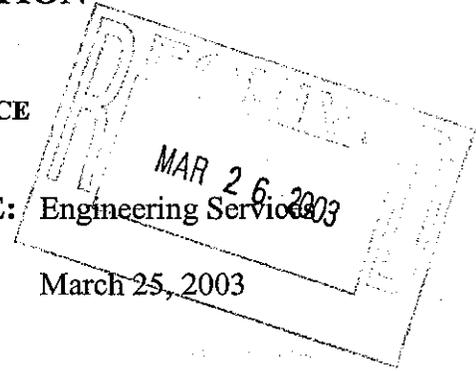
APPROVE



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

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENTAL CORRESPONDENCE**



**FILE:** BRST-114-1(101) Paulding  
P.I. Number 632920

**OFFICE:** Engineering Services

**DATE:** March 25, 2003

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

**TO:** Meg Pirkle, Assistant Director of Preconstruction

**SUBJECT: CONCEPT REPORT**

We have reviewed the concept report submitted March 20, 2003 by the letter from James B. Buchan dated March 20, 2003, and have the following comment.

- If subsurface conditions reveal that the 20' x 20' arch bottomless culvert can not be constructed on spread footings the staging will have to be revised to allow for pile driving.

The costs for this project are:

Construction	\$422,656
Inflation	\$66,621
E&C	\$42,266
Reimbursable Utilities	\$15,000
Right of Way	\$10,000

REW

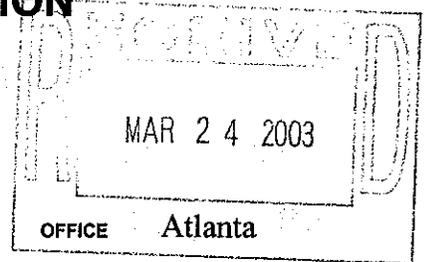
c: Ben Buchan, Attn: Ted Cashin

## SCORING RESULTS AS PER MOG 2440-2

<b>Project Number:</b> BRST-114-1(101)		<b>County:</b> Paulding		<b>PI No.:</b> 632920	
<b>Report Date:</b> March 20, 2003		<b>Concept By:</b> DOT Office: Consultant Design			
<input checked="" type="checkbox"/> <b>Concept Stage</b>		Consultant: Parsons Brincherhoff Quade & Douglas			
<b>Project Type:</b> Choose One From Each Column		<input type="checkbox"/> Major <input checked="" type="checkbox"/> Minor	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Rural	<input type="checkbox"/> ATMS <input checked="" type="checkbox"/> Bridge Replacement <input type="checkbox"/> Building <input type="checkbox"/> Interchange Reconstruction <input type="checkbox"/> Intersection Improvement <input type="checkbox"/> Interstate <input type="checkbox"/> New Location <input type="checkbox"/> Widening & Reconstruction <input type="checkbox"/> Miscellaneous	
<b>FOCUS AREAS</b>	<b>SCORE</b>	<b>RESULTS</b>			
<b>Presentation</b>	100				
<b>Judgement</b>	90	Design of the bottomless arch culvert will be dependant on the subsurface conditions at this site. Staging may have to be revised accordingly.			
<b>Environmental</b>	100				
<b>Right of Way</b>	100				
<b>Utility</b>	100				
<b>Constructability</b>	100				
<b>Schedule</b>	100				

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**INTERDEPARTMENT CORRESPONDENCE**



**FILE** **BRST-114-1(101) Paulding County**  
SR 120 over Silver Comet Trail SW of Dallas  
P.I. No. 632920-

**FROM** *James B. Buchan WSA*  
James B. Buchan, State Consultant Design Engineer

**DATE** March 20, 2003

**TO** Margaret B. 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).

Those on the distribution list below should review the Concept Report and send comments and/or the signature page to the Preconstruction Office within 10 days as per the PDP.

If you have any questions or require further information please call Ted Cashin at (404)463-6135 or John Durand of Parsons Brinckerhoff Quade & Douglas at (404) 364-5236.

*Distribution:*

David Mulling, Project Review Engineer  
Harvey Keepler, State Environmental/Location Engineer  
Phillip Allen, State Traffic Safety and Design Engineer  
Marta Rosen, State Transportation Planning Administrator  
Percy Middlebrooks, Office of Financial Management Administrator  
Kent Sager, District Engineer – Cartersville  
Paul Liles, State Bridge & Structural Engineer

JBB:MBA:EJC

cc: Parsons Brinckerhoff Quade & Douglas

**DEPARTMENT OF TRANSPORTATION**  
**STATE OF GEORGIA**  
*Office of Consultant Design*

**PROJECT CONCEPT REPORT**

Project Number: BRST-114-1(101)

County: Paulding

P. I. Number: 632920

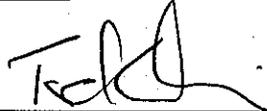
Federal Route Number: N/A

State Route Number: 120

DESCRIPTION: S.R. 120 over Silver Comet Trail

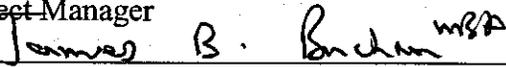
Recommendation for approval:

DATE 3-20-03



Project Manager

DATE 3-20-03



State Consultant Design Engineer

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

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Office of Financial Management Administrator

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Safety and Design Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
District 6 Engineer

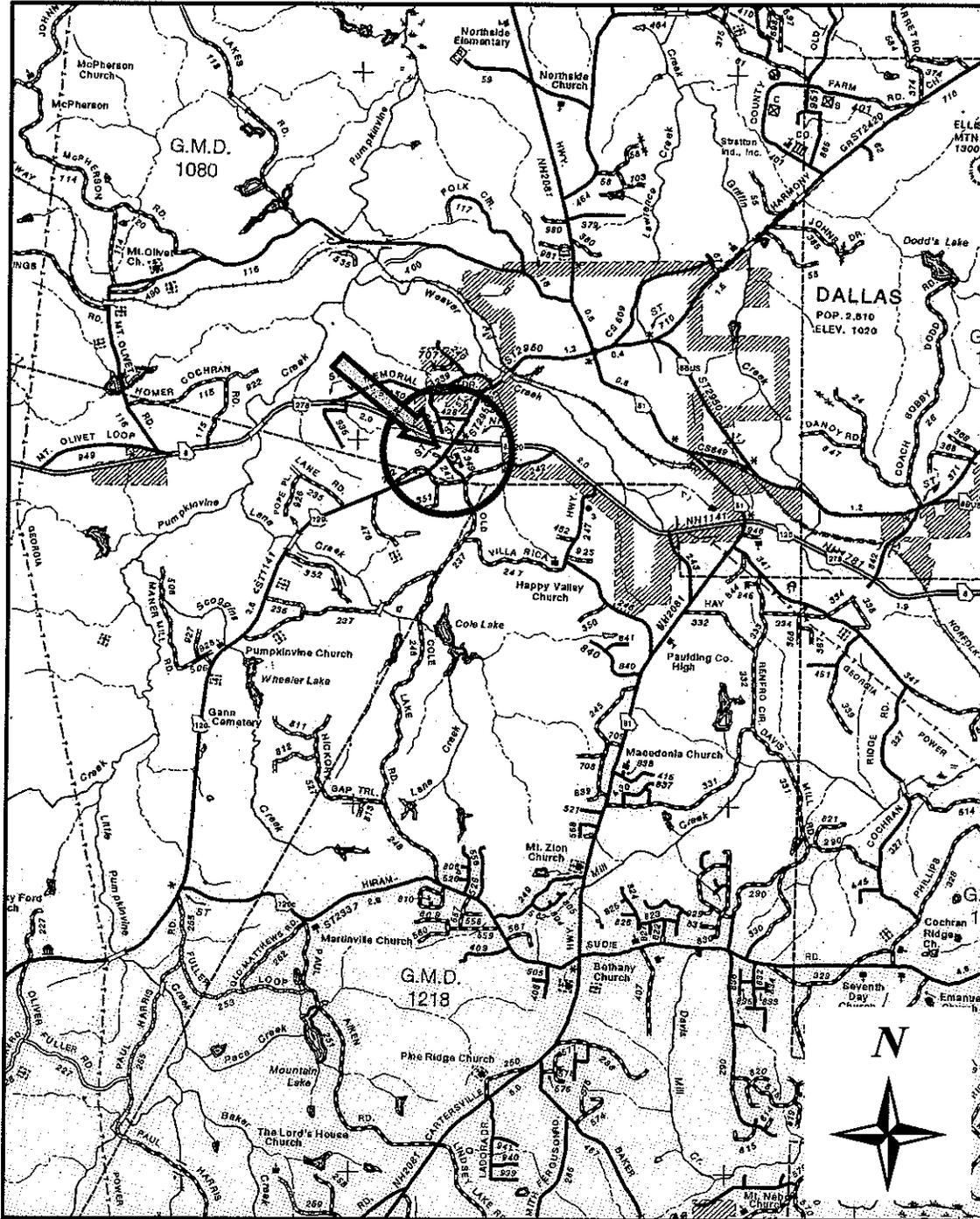
DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Bridge and Structural Design Engineer

Project Concept Report page 2  
Project Number: BRST-114-1(101)  
P. I. Number: 632920  
County: Paulding



Scale: 1 inch = 1 mile  
Location Map

**Project:** BRST-114-1(101), Paulding County, PI No.: 632920-  
**Description:** SR 120 over Silver Comet Trail, 1.1 miles SW of Dallas

Concept Report page 3  
Project Number: BRST-114-1(101)  
P. I. Number: 632920  
County: Paulding

**Need and Purpose:** See attached Need & Purpose Statement.

**Description of the proposed project:** Project BRST-114-1(101) is the replacement of the SR 120 bridge over the Silver Comet Trail. The project length is approximately 550 ft. (0.10 mi.), beginning at M.P. 13.03 and ending at M.P. 13.13. The purpose of the project is to replace the structurally deficient and functionally obsolete bridge. The existing bridge sufficiency rating is currently 43.68.

**Is the project located in a Non-attainment area?**  X  Yes   No  
The proposed design of this project does not add any capacity to S.R. 120. The existing roadway has two lanes. The proposed roadway will be designed for two lanes.

**PDP Classification:** Minor

**Project Designation:** Full Oversight ( ), Exempt( X ), State Funded( ), or Other ( )

**Functional Classification:** Rural Minor Arterial

**U. S. Route Number(s):** None

**State Route Number(s):** 120

**Traffic (AADT):**

Current Year: (2008) 6500

Design Year: (2028) 11000

**Existing design features:**

- Typical Section: 2-12 ft. travel lanes with variable width grass shoulders.
- Posted speed 45 mph Maximum degree of curvature: 1°-10' ±
- Maximum grade: 3.2 %
- Width of right of way: 100 ft.
- Major structures: The 114'-0" bridge consists of three 38'-0" I-beam spans. The bridge roadway curb to curb clear width is 23.80 ft. and has a sufficiency rating of 43.68.
- Major interchanges or intersections along the project: S.R. 120 intersection with U.S. 278, (south leg only).

**Proposed Design Features:**

Proposed typical section(s): Two 12'-0" travel lanes with 10'-0" shoulders. Typical section attached.

- Proposed Design Speed Mainline: 45 mph
- Proposed Maximum grade Mainline: 3.2 %                      Maximum grade allowable: 6.0 %
- Proposed Maximum grade Side Street: N/A                      Maximum grade allowable: 9.0 %
- Proposed Maximum grade driveway: 10.0 %
- Proposed Maximum degree of curve: 1°-10'                      Maximum degree allowable: 11°-28'
- Right of Way
  - Width: 35 ft additional on both sides of roadway.
  - Easements: Temporary (X), Permanent ( ), Utility ( ), Other ( ).
  - Type of access control: Full ( ), Partial ( ), By Permit ( X ), Other ( ).
  - Number of parcels: 5 Number of displacements: None
    - Business: 0
    - Residences: 0
    - Mobile homes: 0
    - Other: 0
- Structures:
  - Culvert: The proposed pedestrian culvert will be precast concrete, 20'-0" wide and 20'-0" high, consisting of one single, arch-shaped, bottomless barrel with wing walls at both ends. The pedestrian culvert is expected to be approximately 90' long.
  - Retaining Walls: None.
- Major intersections and interchanges: S.R. 120 intersection with U.S. 278, (south leg only).
- Traffic control during construction: Traffic shall be maintained on the existing bridge while the proposed pedestrian culvert is constructed underneath the bridge. Traffic will then be detoured offsite while the existing bridge is demolished and the final roadway constructed.
- 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:	( )	( )	(X)
SUPERELEVATION RATES:	( )	( )	(X)
HORIZONTAL CLEARANCE:	( )	( )	(X)
SPEED DESIGN:	( )	( )	(X)
VERTICAL CLEARANCE:	( )	( )	(X)
BRIDGE WIDTH:	( )	( )	(X)
BRIDGE STRUCTURAL CAPACITY:	( )	( )	(X)

- Design Variances: None
- Environmental concerns: None

Project Concept Report page 5  
Project Number: BRST-114-1(101)  
P. I. Number: 632920  
County: Paulding

- Level of environmental analysis:
  - Are Time Savings Procedures appropriate? Yes (X), No ( ),
  - Categorical exclusion anticipated (X),
  - Environmental Assessment/Finding of No Significant Impact (FONSI) ( ), or
  - Environmental Impact Statement (EIS) ( ).
- Utility involvement: Buried and overhead utilities include an existing waterline on west side and existing telephone on east side, supported by the bridge structure. Other utilities include underground telephone/fiber optic lines along south side of The Silver Comet Trail. A buried natural gas pipeline runs along east side of bridge, but is not supported by bridge.

**Project responsibilities:**

- Design: Office of Consultant Design
- Right of Way Acquisition: District 6 Pre-construction ( Right of Way Office)
- Relocation of Utilities: District 6 Utility Office
- Letting to contract: General Office ( Office of Contract Administration)
- Supervision of construction: District 6 Construction Office
- Providing material pits: Contractor
- Providing detours: Contractor

**Coordination**

- Initial Concept Meeting date and brief summary: March 4, 2003. Attach Minutes: Yes
- Concept meeting date: Same as Initial Meeting
- P. A. R. meetings, dates and results: None Anticipated
- Public involvement: PIM for off-site detour
- Local government comments: Paulding refused Utilities 8-11-99
- Other projects in the area: None
- Other coordination to date: None identified

**Scheduling – Responsible Parties' Estimate**

- Time to complete the environmental process: 9 Months.
- Time to complete preliminary construction plans: 4 Months.
- Time to complete right of way plans: 2 Months.
- Time to complete final construction plans: 9 Months.
- Time to complete purchase of right of way: 9 Months.
- List other major items that will affect the project schedule: N/A Months

Project Concept Report page 6  
Project Number: BRST-114-1(101)  
P. I. Number: 632920  
County: Paulding

Alternates considered: (1) Build proposed bridge parallel and offset from existing; demolish existing bridge; (2) Build proposed bridge on same location as the existing with off-site detour; close road; (3) Build pedestrian bottomless arch culvert on same location as the existing with off-site detour; close road; (4) No Build; (5) Build proposed bridge on same location as the existing bridge while maintaining traffic with a temporary on-site detour.

**Comments:**

**Comparison Summary of Concepts 1 - 4**

Alternate (3) was selected because it provides the lowest cost, least impact to adjacent properties, and minimizes the road closure time. The size of the bottomless arch culvert, 20' by 20', was chosen to maximize visibility and safety to the public use of the multi-use trail. Alternate (1) was eliminated due to the close proximity of the U.S. 278 intersection. The intersection would need to be relocated to accommodate the offset horizontal alignment. Alternate (2) was eliminated due to the increased time an offsite detour would be required, and the higher cost associated with a replacement bridge. Alternate (4) was eliminated due to long term maintenance of the structurally deficient bridge, and the substandard horizontal clearance of the existing bridge. Alternate (5) was eliminated due to the close proximity of the U.S. 278 intersection. The short distance from the proposed bridge to the intersection would necessitate using substandard horizontal geometry to tie the temporary on-site detour back into the existing intersection, or the intersection would need to be relocated to accommodate the temporary on-site detour.

**Attachments:**

1. Preliminary Cost Estimates (Construction including E&C & Inflation).
  - a. Alternate (3)
  - b. Alternate (2)
2. Typical sections.
3. Need and Purpose Statement.
4. Traffic Assignments.
5. Flexible Pavement Design.
6. Bridge Inventory Data Listing.
7. Off-site Detour Map.
8. Project Concept Conformity/Certification letter.
9. Minutes from Initial Concept Meeting (Held March 4, 2003).
10. Location and Design Notice (On Minor Projects).

**PRELIMINARY COST ESTIMATE**

DATE: March 6, 2003

PREPARED BY: Heath & Lineback Engineers, Inc.

PROJECT NO.: BRST-114-1(101)

P.I. NO.: 632920

LENGTH: 550 ft. (0.10 mi)

PROJECT DESCRIPTION: Bridge replacement of the SR 120 bridge over Silver Comet Trail.

PROPOSED CONCEPT: The proposed typical section consists of two 12'-0" travel lanes and 10'-0" rural shoulders. Traffic will be maintained on existing bridge, on-site, during construction of pedestrian culvert. Traffic will then be temporarily detoured offsite while the existing bridge is demolished and the final proposed roadway surface constructed.

EXISTING ROADWAY: State Route 120

TRAFFIC: Existing: 6500 AADT (2008) Design: 11000 AADT (2028)

( ) PROGRAMMING PROCESS (X) CONCEPT DEVEL. ( ) DURING PROJ DEVEL.

# PROJECT COSTS

01-Nov-02 PEDESTRIAN CULVERT WITH OFF-SITE DETOUR ALTERNATE  
 DETAILED COST ESTIMATE FOR SR 120 OVER SILVER COMET TRAIL  
 PROJECT NO.: BRST-114-1(101), PAULDING COUNTY  
 P.I. NO.: 632920

ITEM NO.	ITEM	UNIT	UNIT COST	QUANT	TOTAL
<b>ROADWAY</b>					
210-0100	GRADING COMPLETE - (9,155 CY @ \$5.00/CY)	LS	\$45,775.00	1	\$45,775.00
310-5120	GR AGGR BASE CRS, 12 INCH, INCL MATL	SY	\$8.04	622	\$5,002.67
318-3000	AGGR SURF CRS	TN	\$19.18	10	\$191.80
402-1812	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	TN	\$35.62	50	\$1,781.00
402-3121	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM	TN	\$34.80	179	\$6,211.80
402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM	TN	\$35.32	132	\$4,672.84
402-3142	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL	TN	\$53.63	71	\$3,829.18
413-1000	BITUM TACK COAT	GL	\$0.89	44	\$38.76
550-1180	STORM DRAIN PIPE, 18 IN, H 1-10	LF	\$31.58	40	\$1,263.20
550-4418	FLARED END SECTION, 18 IN, SLOPE DRAIN	EA	\$266.66	2	\$533.32
576-1015	SLOPE DRAIN PIPE, 15 IN	LF	\$23.33	160	\$3,732.80
577-1100	METAL DRAIN INLET - COMPLETE ASSEMBLY	EA	\$956.06	4	\$3,824.24
641-1200	GUARDRAIL, TP W	LF	\$9.87	900	\$8,883.00
641-5001	GUARDRAIL ANCHORAGE, TP 1	EA	\$483.87	3	\$1,451.61
641-5012	GUARDRAIL ANCHORAGE, TP 12	EA	\$1,331.30	3	\$3,993.90
				<b>SUBTOTAL</b>	<b>\$91,185.12</b>
<b>EROSION CONTROL</b>					
000-0000	EROSION CONTROL	LS	\$50,000.00	1	\$50,000.00
				<b>SUBTOTAL</b>	<b>\$50,000.00</b>
<b>BRIDGE</b>					
540-1102	REMOVAL OF EXISTING BR, BR NO -	LS	\$30,000.00	1	\$30,000.00
<b>PEDESTRIAN CULVERT</b>					
000-0000	PRECAST CONCRETE, BOTTOMLESS, PEDESTRIAN CULVERT	LS	\$216,471.00	1	\$216,471.00
000-0000	TERRACES & LANDSCAPING	LS	\$20,000.00	1	\$20,000.00
				<b>SUBTOTAL</b>	<b>\$236,471.00</b>
<b>TRAFFIC SIGN &amp; MARKING</b>					
000-0000	TRAFFIC SIGNING & MARKING	LS	\$5,000.00	1	\$5,000.00
				<b>SUBTOTAL</b>	<b>\$5,000.00</b>
<b>TRAFFIC CONTROL - OFF SITE DETOUR</b>					
150-1000	TRAFFIC CONTROL -	LS	\$10,000.00	1	\$10,000.00
				<b>SUBTOTAL</b>	<b>\$10,000.00</b>

**CONSTRUCTION COST \$422,656.12**

**CONSTRUCTION: \$422,656.12**

**RIGHT OF WAY: \$10,000.00**

**E & C (10%): \$42,265.61**

**ACQUIRED BY: DOT**

**INFLATION: \$66,621.17**  
 (3 yrs. @ 5% per yr.)

**UTILITIES: \$15,000.00**

**TOTAL CONST COSTS \$531,542.90**

# PROJECT COSTS

19-Nov-02 BRIDGE WITH OFF-SITE DETOUR ALTERNATE

DETAILED COST ESTIMATE FOR SR 120 OVER SILVER COMET TRAIL

PROJECT NO.: BRST-114-1(101), PAULDING COUNTY

P.I. NO.: 632920

ITEM NO.	ITEM	UNIT	UNIT COST	QUANT	TOTAL
<b>ROADWAY</b>					
210-0100	GRADING COMPLETE - (2,933 CY @ \$5.00/CY)	LS	\$14,665.00	1	\$14,665.00
310-5120	GR AGGR BASE CRS, 12 INCH, INCL MATL	SY	\$8.04	311	\$2,501.33
318-3000	AGGR SURF CRS	TN	\$19.18	10	\$191.80
402-1812	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	TN	\$35.62	50	\$1,781.00
402-3121	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITL	TN	\$34.80	89	\$3,105.90
402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL B	TN	\$35.32	106	\$3,727.14
402-3142	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL	TN	\$53.63	36	\$1,914.59
413-1000	BITUM TACK COAT	GL	\$0.89	22	\$19.38
433-1000	REINF CONC APPROACH SLAB	SY	\$115.12	310	\$35,687.20
441-0301	CONC SPILE	EA	\$1,345.24	2	\$2,690.48
550-1180	STORM DRAIN PIPE, 18 INCH 1-10	LF	\$31.58	40	\$1,263.20
550-4418	FLARED END SECTION, 18 INCH SLOPE DRAIN	EA	\$266.66	2	\$533.32
576-1015	SLOPE DRAIN PIPE, 18 INCH	LF	\$23.33	80	\$1,866.40
577-1100	METAL DRAIN INLET - COMPLETE ASSEMBLY	EA	\$956.06	2	\$1,912.12
641-1100	GUARDRAIL, TP T	LF	\$61.68	83	\$5,094.77
641-1200	GUARDRAIL, TP W	LF	\$9.87	675	\$6,662.25
641-5001	GUARDRAIL ANCHORAGE, TP	EA	\$483.87	3	\$1,451.61
641-5012	GUARDRAIL ANCHORAGE, TP 12	EA	\$1,331.30	3	\$3,993.90
				<b>SUBTOTAL</b>	<b>\$89,061.40</b>
<b>EROSION CONTROL</b>					
000-0000	EROSION CONTROL		\$50,000.00	1	\$50,000.00
				<b>SUBTOTAL</b>	<b>\$50,000.00</b>
<b>BRIDGE</b>					
540-1102	REMOVAL OF EXISTING BR, BR NO -	LS	\$40,000.00	1	\$40,000.00
543-1001	CONSTRUCTION OF BRIDGE NO. (\$55/SF X 4725 SF)	LS	\$29,875.00	1	\$259,875.00
000-0000	TERRACES & LANDSCAPING	LS	\$20,000.00	1	\$20,000.00
				<b>SUBTOTAL</b>	<b>\$319,875.00</b>
<b>TRAFFIC SIGN &amp; MARKING</b>					
000-0000	TRAFFIC SIGNING & MARKING		\$5,000.00	1	\$5,000.00
				<b>SUBTOTAL</b>	<b>\$5,000.00</b>
<b>TRAFFIC CONTROL - OFF SITE DETOUR</b>					
150-1000	TRAFFIC CONTROL -	LS	\$20,000.00	1	\$20,000.00
				<b>SUBTOTAL</b>	<b>\$20,000.00</b>
				<b>CONSTRUCTION COST</b>	<b>\$483,936.40</b>
<b>CONSTRUCTION:</b>	<b>\$483,936.40</b>			<b>RIGHT OF WAY:</b>	<b>\$10,000.00</b>
<b>E &amp; C (10%):</b>	<b>\$48,393.64</b>			<b>ACQUIRED BY:</b>	<b>DOT</b>
<b>INFLATION:</b> (3 yrs. @ 5% per yr)	<b>\$76,280.47</b>			<b>UTILITIES:</b>	<b>\$15,000.00</b>
<b>TOTAL CONST COSTS</b>		<b>\$608,610.51</b>			

NOT THIS RECOMMENDED ALTERNATE



**NEED AND PURPOSE**  
**PROJECT BRST-114-1(101), PAULDING COUNTY**  
**PI No. 632920**

**BRIDGE REPLACEMENT**

Bridge project BRST-114-1(101) will replace the structurally deficient bridge located on State Road (SR) 120 over Silver Comet Trail, southwest of the city of Dallas.

The existing bridge was constructed in 1949. The original design load capacity is H-15 and the bridge is classified as Functionally Obsolete. The existing bridge's sufficiency rating is 43.68. The sufficiency rating, a number from 0 to 100, is a method of evaluating structural adequacy and safety, serviceability and functional obsolescence. The resultant rating would range between zero, which represents an entirely insufficient or deficient bridge; and 100, which represents an entirely sufficient bridge. The Office of Bridge Maintenance has determined that any structure with a sufficiency rating less than 50 should be replaced rather than improved. This project will replace the existing bridge with a structurally adequate bridge.

This section of SR 120 is classified as a Rural Minor Arterial, is a designated school bus route and is not on a bike route. The posted speed limit along SR 120 is 45 mph. The Annual Average Daily Traffic (AADT) along this section of roadway was 5,050 vehicles in 2000 with 15 percent trucks. The projected traffic (2028) for this section of roadway is 11,000 AADT.

Replacing the existing bridge will bring it up to current design standards and in doing so will improve the operation and safety of this roadway.

# Department of Transportation State of Georgia

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## INTERDEPARTMENT CORRESPONDENCE

**FILE** BRST-114-1(101), Paulding County  
P.I. # 632920

**OFFICE** Environment/Location

**DATE** April 17, 2002

**FROM** Harvey D. Keeper., State Environment/Location Engineer

**TO** James B. Buchan, P.E., State Consultant Design Engineer.  
**Attn.** Ted Cashin

**SUBJECT** Traffic Assignments for S.R. 120 at Abandoned RR SW of Dallas in Paulding County.

We are furnishing estimated traffic assignments for the above project as follows:

2000 AADT = 5050

2008 AADT = 6500

2028 AADT = 11000

K = 10%

D = 60%

T = 12%

24 HR. T = 15%

S.U. = 6%

COMB. = 9%

If you have any questions concerning this information please contact  
Abby Ebodaghe at (404) 699-4460.

HDK/AFE



# BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 223-0020-0

Paulding

SUFF. RATING

43.68

## Location & Geography

\* Structure I.D.No: 223-0020-0

\* 200 Bridge Information 07

\* 6A Feature Int: SILVER COMET TRAIL

\* 6B Critical Bridge: 0

\* 7A Route Number Carried: SR00120

\* 7B Facility Carried: SR 120

\* 9 Location: 1.1 MI SW OF DALLAS

2 DOT District: 6

207 Year Photo: 1998

\* 91 Inspection Frequency: 24 Date: 06/07/2000

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: 3

Designation: 1

Number: 00120

Direction: 0

\* 16 Latitude: 33-54.7

\* 17 Longitud 84-51.5

MP: 13.08

98 Border Bridge: 000

%Shared: 00

99 ID Number: 0000000000000000

\* 100 STRAHNET: 0

12 Base Highway Network: 1

13A LRS Inventory Route: 2231012000

13B Sub Inventory Route: 0

\* 101 Parallel Structure: N

\* 102 Direction of Traffic: 2

\* 264 Road Inventory Mile Post: 013.08

\* 208 Inspection Area: 09

Initials: JMC

Engineer's Initial:

\* Location I.D. No.: 223-00120D-013.32E

## Signs & Attachments

\* 104 Highway System: 0

\* 26 Functional Classification: 06

\* 204 Federal Route Type: F No.: 01141

\* 105 Federal Lands Highway: 0

\* 110 Truck Route: 1

206 School Bus Route: 0000.00

217 Benchmark Elevation: 0

218 Datum: 19

\* 19 Bypass Length: 3

\* 20 Toll: 01

\* 21 Maintenance: 01

\* 22 Owner: 2

\* 31 Design Load: 5

37 Historical Significance: 07

205 Congressional District: 1949

27 Year Constructed: 0000

106 Year Reconstructed: 0

33 Bridge Median: 35

34 Skew: 0

35 Structred Flared: 0

38 Navigation Control: N

213 Special Steel Design: 0

267 Type of Paint: 1

\* 42 Type of Service on: 3

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: 003

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

Mc 0

F 0

225 Expansion Joint Type: 02

242 Deck Drains: 0

243 Parapet Location: 0

Height: 0.00

Width: 0.00

238 Curb: 1.20 1

239 Handrail: 1 1

\* 240 Median Barrier Rail: 0

241 Bridge Median Height: 0.00

Width: 0.00

\* 230 Guardrail Loc Dir Rear: 3

Fwr: 3

Oppo Dir Rear: 0

Fwr: 0

244 Approach Slab: 0

224 Retaining Wall: 0

233 Posted Speed Limit: 45

236 Warning Sign: 1

234 Delineator: 1

235 Hazard Boards: 1

237 Utilities Gas: 00

W 31

Ele 00

Telephone: 32

S& 00

247 Lighting Street: 0

Naviagtion: 0

Aerial: 0

\* 248 County Continuity No.: 00

# BRIDGE INVENTORY DATA LISTING GEORGIA DEPARTMENT OF TRANSPORTATION

Structure ID: 223-0020-0

Paulding

SUFF. RATING

43.68

## Programming Data

201 Project No.: FAGS-180-B  
 202 Plans Available: 1  
 249 Prop. Proj. No. BRST-114-1(101)  
 250 Approval Status: 0000  
 251 P.I. No.: 632920-  
 252 Contract Date: 02/01/2005  
 260 Seismic No.: 00000  
 75 Type Work: 34 1  
 94 Bridge Imp. Cost \$ 139  
 95 Roadway Imp. Cos \$ 44  
 96 Total Imp Cost: \$ 239  
 76 Imp. Length: 000325  
 97 Imp. Year: 1990  
 114 Future ADT: 007950 Year: 2021

## Measurements

\* 29 ADT: 005300 Year: 2001  
 109 % Trucks: 15  
 \* 28 Lanes On: 02 Under: 00  
 210 No. Tracks On: 00 Under: 00  
 \* 48 Max. Span Length: 0038  
 \* 49 Structure Length: 114  
 51 Br. Rwdy. Width: 23.80  
 52 Deck Width: 27.30  
 \* 47 Tot. Horz. Cl: 23.80  
 50 Curb/Sdewlk Width: 0.90/0.90  
 32 Approach Rdwy Width: 028  
 \* 229 Shoulder Width:  
 Rear Lt: 2.00 Type: 2 Rt: 2.00  
 Fwd Lt: 2.00 Type: 2 Rt: 2.00  
 Pavement Width:  
 Rear: 24.00 Type: 2  
 Fwd: 24.00 Type: 2  
 Intersection Rear: 1 Fwd: 1  
 36 Safety Features Br. Rail: 2  
 Transition: 2  
 App. G. Rail: 1  
 App. Rail End: 1  
 53 Minimum Cl.Over: 99 ' 99 "  
 Under: N 00 ' 00 "  
 \* 228 Min. Vertical Cl  
 Act. Odm Dir: 99 ' 99 "  
 Opp. Dir: 99 ' 99 "  
 Posted Odm. Dir: 00 ' 00 "  
 Opp. Dir: 00 ' 00 "  
 55 Lateral Undercl. Rt: N 99.90  
 56 Lateral Undercl. Lt: 0.00  
 \* 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: 6.80  
 Deck Thick Approach: 0.00  
 246 Overlay Thickness: 0.00  
 212 Year Last Painted: Sup: 1981 Sub: 0000

## Ratings

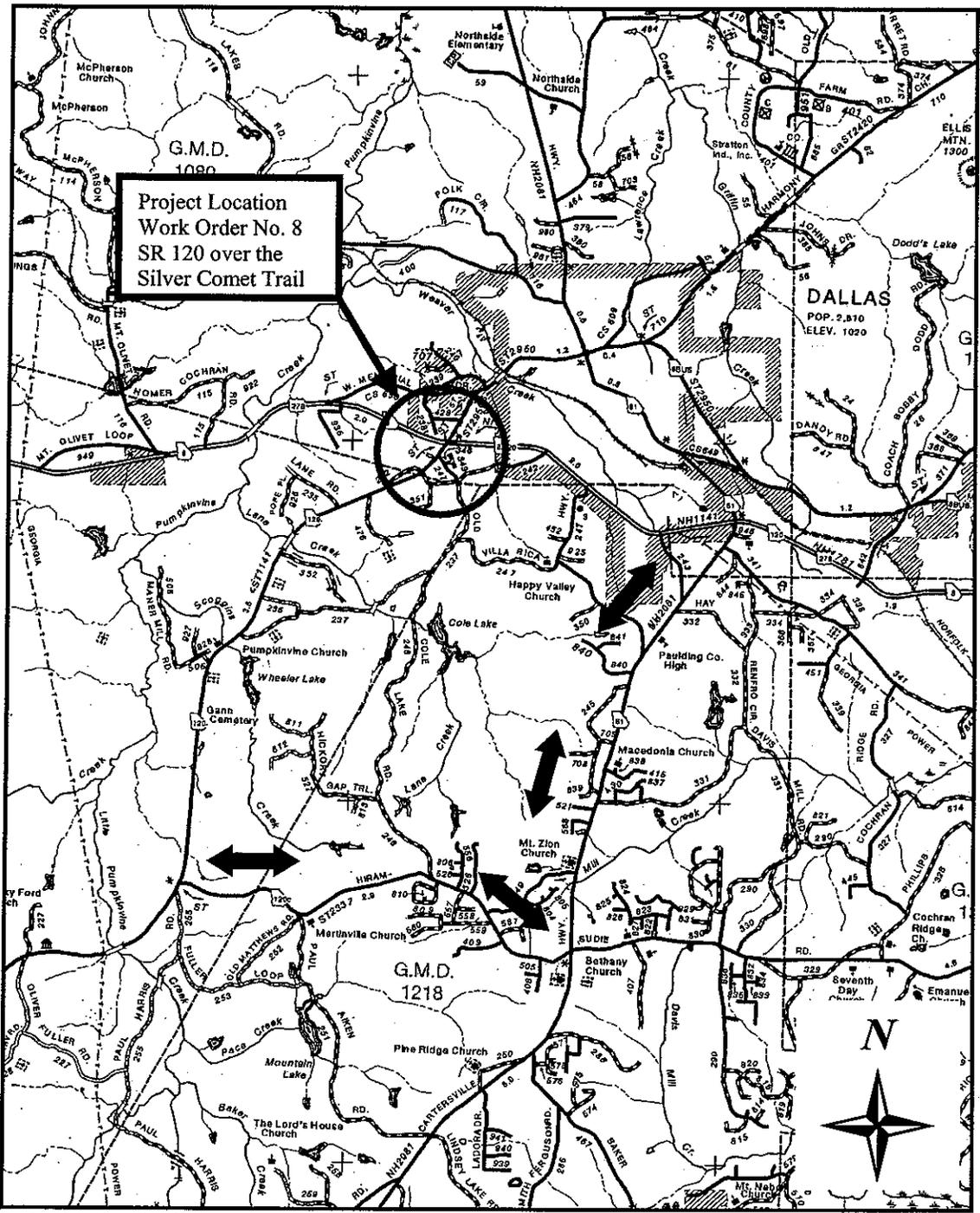
65 Inventory Rating Method: 2  
 63 Inventory Rating Method: 2  
 66 Inventory Type: 2 Rating: 24  
 64 Operating Type: 2 Rating: 37  
 231 Calculated Loads  
 H-Modified: 20 0  
 HS-Modified: 25 0  
 Type 3: 26 0  
 Type 3s2: 40 0  
 Timber: 36 0  
 Piggyback: 40 0  
 261 H Inventory Rating: 15  
 262 H Operating Rating: 21  
 67 Structural Evaluation: 5  
 58 Deck Condition: 6  
 59 Superstructure Condition: 6  
 \* 227 Collision Damage: 0  
 60A Substructure Condition: 5  
 60B Scour Condition: N  
 60C Underwater Condition: N  
 71 Waterway Adequacy: N  
 61 Channel Protection Cond: N  
 68 Deck Geometry: 2  
 69 UnderClr. Horz/Vert: N  
 72 Appr. Alignment: 8  
 62 Culvert: N

## Hydraulic Data

215 Waterway Data  
 Highway 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: 0  
 221 Spur Dikes Rear: 0 Fwd: 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 Diver: ZZZ  
 \* 265 U/W Insp. Area: 0  
 \* Location I.D. No.: 223-00120D-013.32E

## 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



Scale: 1 inch = 1 mile

**Work Order No. 8**  
**Recommended Detour Route – 6.9 miles**  
**SR 120 over Silver Comet Trail, 1.1 miles SW of Dallas**  
**Project No.: BRST-114-1(101), Paulding County**  
**PI No.: 632920**

**CONCEPT MEETING MINUTES**  
**March 4, 2003**

**CONCEPT MEETING FOR BRIDGE REPLACEMENT WORK ORDERS**  
**W.O. #8 – SR 120 over the Silver Comet Trail, 1.1 mi SW of Dallas**  
**Project No.: BRST-114-1(101), Paulding County**  
**PI No.: 632920**

**LOCATION:** GADOT District 6 Office  
Cartersville, GA

**Attendees:** Allen Krivsky – Heath & Lineback Engineers  
Andrew Heath – Heath & Lineback Engineers  
John Durand – Parsons Brinckerhoff Quade & Douglas  
Jane Heming – Real Property Consultants  
DeWayne Comer – GDOT District 6 Preconstruction Engineer  
Ted Cashin – GDOT Office of Consultant Design  
Steve Sanders – GDOT District 6 Traffic Operations  
David Moore – GDOT District 6 Design  
Jennifer Deems – GDOT District Utilities  
Kerry Bonner – GDOT District 6 Utilities  
Sebastian O. Nesbitt – GDOT Area 5 Construction  
Harlan Conley – GDOT Location  
Darrin Wood – MCIWORLD.COM OSP  
Joe de Grom - BellSouth

Allen Krivsky described the project and read through the concept report to familiarize all attendees with the project.

It was recommended that Heath & Lineback contact Ed McBrayer of the PATH Foundation concerning the coordination required with regard to the Silver Comet Trail. Items such as temporarily closing the Trail during construction, diverting the Trail on-site, openness, safety, and any required internal illumination should be investigated.

If internal illumination of the proposed bottomless culvert should be required, Paulding County may be responsible for maintenance and any continuing expenses such as electricity costs.

It was recommended that the depth of fill over the proposed culvert be increased to provide sufficient cover over buried utilities.

District 6 recommends that the typical section be modified so that the front slope is 15' wide and slopes at 6:1. The intent of this change is to bring the typical section into compliance with a new understanding of the 2002 Roadside Design Guide's requirements concerning clearzone distance.

It was noted that due to the large volume of school busses utilizing this route, it would be advantageous if construction took place during summer months when school is out.

The Draft Concept Report should be modified to make the Contractor responsible for providing material pits and detours.

**NOTICE OF LOCATION AND DESIGN APPROVAL**

**Project No. BRST-114-1 (101)**

**P.I. No. 632920**

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

This project consists of improvements to S.R. 120 over Silver Comet Trail, located in Paulding County, in G.M.D 1080. The improvement project includes replacing the existing bridge over the Silver Comet Trail.

Date of Location Approval: APRIL 25, 2003

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

*David Fincher*  
*District 6, Area 5 Engineer*  
*Email: david.fincher@dot.state.ga.us*  
*4323 US Hwy. 27*  
*Buchanan, Georgia 30113*  
*770-646-5522*

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:

*Ted Cashin*  
*Office of Consultant Design*  
*Email: ted.cashin@dot.state.ga.us*  
*Georgia Department of Transportation*  
*No. 2 Capitol Square*  
*Atlanta, Georgia 30334*  
*404-463-6135*

Any written request 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**  
*Office of Consultant Design*

**PROJECT CONCEPT REPORT**

Project Number: BRST-114-1(101)

County: Paulding

P. I. Number: 632920

Federal Route Number: N/A

State Route Number: 120

DESCRIPTION: S.R. 120 over Silver Comet Trail

Recommendation for approval:

DATE 3-20-03

DATE 3-20-03

  
\_\_\_\_\_  
Project Manager  
James B. Buckner <sup>WBA</sup>  
\_\_\_\_\_  
State Consultant Design Engineer

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

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Office of Financial Management Administrator

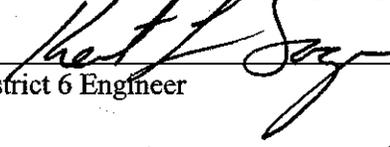
DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Safety and Design Engineer

DATE 3/26/03

  
\_\_\_\_\_  
District 6 Engineer

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Bridge and Structural Design Engineer

**DEPARTMENT OF TRANSPORTATION**  
**STATE OF GEORGIA**  
*Office of Consultant Design*

**PROJECT CONCEPT REPORT**

Project Number: BRST-114-1(101)

County: Paulding

P. I. Number: 632920

Federal Route Number: N/A

State Route Number: 120

DESCRIPTION: S.R. 120 over Silver Comet Trail

Recommendation for approval:

DATE 3-20-03

*T. Kelly*  
Project Manager  
*James B. Buchanan M.S.E.*  
State Consultant Design Engineer

DATE 3-20-03

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

DATE \_\_\_\_\_

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

DATE 3/25/03

*Ray Miller*  
State Office of Financial Management Administrator

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Safety and Design Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
District 6 Engineer

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Bridge and Structural Design Engineer

**DEPARTMENT OF TRANSPORTATION**  
**STATE OF GEORGIA**  
*Office of Consultant Design*

**PROJECT CONCEPT REPORT**

Project Number: BRST-114-1(101)

County: Paulding

P. I. Number: 632920

Federal Route Number: N/A

State Route Number: 120

DESCRIPTION: S.R. 120 over Silver Comet Trail

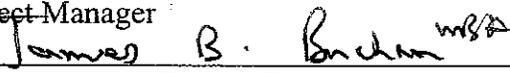
Recommendation for approval:

DATE 3-20-03



Project Manager

DATE 3-20-03



State Consultant Design Engineer

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

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Office of Financial Management Administrator

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Safety and Design Engineer

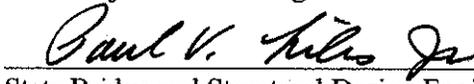
DATE \_\_\_\_\_

\_\_\_\_\_  
District 6 Engineer

DATE \_\_\_\_\_

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

DATE 3/30/03



State Bridge and Structural Design Engineer

**DEPARTMENT OF TRANSPORTATION**  
**STATE OF GEORGIA**  
*Office of Consultant Design*

**PROJECT CONCEPT REPORT**

Project Number: BRST-114-1(101)

County: Paulding

P. I. Number: 632920

Federal Route Number: N/A

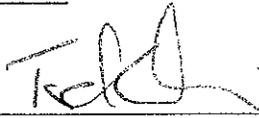
State Route Number: 120

DESCRIPTION: S.R. 120 over Silver Comet Trail

Recommendation for approval:

DATE 3-20-03

DATE 3-20-03

  
\_\_\_\_\_  
Project Manager  
James B. Buckner *MBA*  
\_\_\_\_\_  
State Consultant Design Engineer

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

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Office of Financial Management Administrator

DATE \_\_\_\_\_

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

DATE \_\_\_\_\_

\_\_\_\_\_  
State Traffic Safety and Design Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
District 6 Engineer

DATE 3/25/03

David J. Mullins *new*  
\_\_\_\_\_  
State Project Review Engineer

DATE \_\_\_\_\_

\_\_\_\_\_  
State Bridge and Structural Design Engineer

THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
5800 S. UNIVERSITY AVENUE  
CHICAGO, ILLINOIS 60637

PROFESSOR [Name]  
[Address]  
[City, State, Zip]

Dear Professor [Name]:

I am writing to you regarding the [topic] of your recent paper. I have read your work with great interest and find it very informative. The data presented in your paper is quite compelling and I would like to discuss it further.

I am currently working on a project related to [topic] and your findings are very relevant to my work. I would appreciate it if you could provide me with more details on [specific aspect].

I would be happy to meet with you at your convenience to discuss this further. Please let me know when you are available.

I am looking forward to hearing from you soon.

Sincerely,  
[Name]

[Address]  
[City, State, Zip]

[Phone Number]

[Email Address]

[Additional Information]

[Closing Remarks]

[Final Signatures]