

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-111-1(32) Chatham County **OFFICE** Preconstruction
P. I. No. 533200
Drainage Improvements on Abercorn Extension **DATE** March 9, 2005
at Harmon Canal

FROM *Cylin Smith*
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 Keepler
- Ken Thompson
- Jamie Simpson
- Michael Henry
- Keith Golden
- Joe Palladi (file copy)
- Paul Liles
- Babs Abubakari
- Ben Buchan
- Gary Priester
- BOARD MEMBER

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-111-1(32) Chatham County **OFFICE** Preconstruction
P.I. No. 533200

Drainage Improvements on Abercorn Ext.
at Harmon Canal

DATE February 22, 2005

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

TO *for* Paul V. Mullins, P.E., Chief Engineer

SUBJECT PROJECT CONCEPT REPORT

This project consists of improving the drainage capacity of the existing culvert on SR 204/Abercorn Extension at Harmon Canal in Savannah. The existing culvert is a double 9' x 8' reinforced concrete box culvert. This culvert is inadequate to receive and pass storm water during intense rainfall events. This project will improve the efficiency of the culvert, thus satisfying the current hydraulic performance requirements and provide the roadway with necessary protection from expected flood events. The existing roadway section consists of three, 12' lanes in each direction separated by a 20' raised median, 12' shoulders, and 30" curb and gutter on both sides. The posted speed is 45 MPH.

The construction proposes to construct a 10' x 8' precast culvert barrel on the south side of the existing double 9' x 8' reinforced box culvert to improve the drainage capacity of the structure. No changes are proposed for SR 204/Abercorn Extension. Traffic will be maintained with a minimum of 2 lanes in each direction at all times during construction. Construction will be staged to proceed from one end of the culvert to the other.

Environmental concerns include requiring a COE 404 Permit; a Categorical Exclusion will be prepared; a public hearing open house is not required; 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)	\$1,009,000	\$750,000	Q10	2009
Right-of-Way	\$261,000	\$261,000	Q10	
Utilities*	LGPA	LGPA		

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE BRST-111-1(32), Chatham
PI 533200

Culvert Replacement on 204/Abercorn Extension
@ Harmon Canal West of White Bluff Road

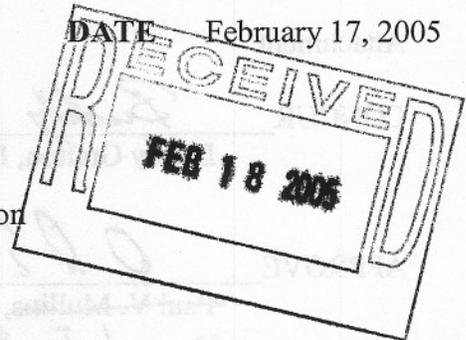
FROM *James B. Buchan*
James B. Buchan, P.E., State Urban Design Engineer

TO Margaret B. Pirkle, P.E., Assistant Director of Preconstruction

SUBJECT Project Concept Report

OFFICE Urban Design

DATE February 17, 2005



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 concerning this matter, please call Darryl VanMeter or Peter Eze at (404) 656-5447.

JBB:DVM: ^{DVM}pie
Attachment

cc: David Mulling, Project Review Engineer, w/attachment
Harvey Keeper, State Environmental/Location Engineer, w/attachment
Keith Golden, P.E., State Traffic Safety and Design Engineer, w/attachment
Joseph P. Palladi, P.E., State Transportation Planning Administrator, w/attachment
Jamie Simpson, Financial Management Administrator, w/attachment
Paul Liles, P.E., State Bridge & Structural Engineer, w/attachment
Gary Priester, District 5 Engineer, w/attachment

Paul V. Mullins
Page 2

BRST-111-1(32) Chatham
February 22, 2005

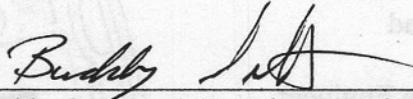
*City of Savannah signed LGPA on 4-2-02 for utilities.

I recommend this project concept be approved.

MBP:JDQ/cj

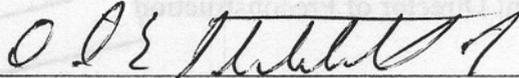
Attachment

CONCUR



Buddy Gratton, P.E., Director of Preconstruction

APPROVE



Paul V. Mullins, P.E., Chief Engineer

David E. Spindler, Jr.

JBB:DM:pic
Attachment

cc: David Mullins, Project Review Engineer, w/attachment
Harvey Keebler, State Environmental Location Engineer, w/attachment
Keith Golden, P.E., State Traffic Safety and Design Engineer, w/attachment
Joseph P. Palford, P.E., State Transportation Planning Administrator, w/attachment
Janice Simpson, Financial Management Administrator, w/attachment
Paul Liles, P.E., State Bridge & Structural Engineer, w/attachment
Gary Priestler, District 2 Engineer, w/attachment

DEPARTMENT OF TRANSPORTATION

Urban Design

PROJECT CONCEPT REPORT

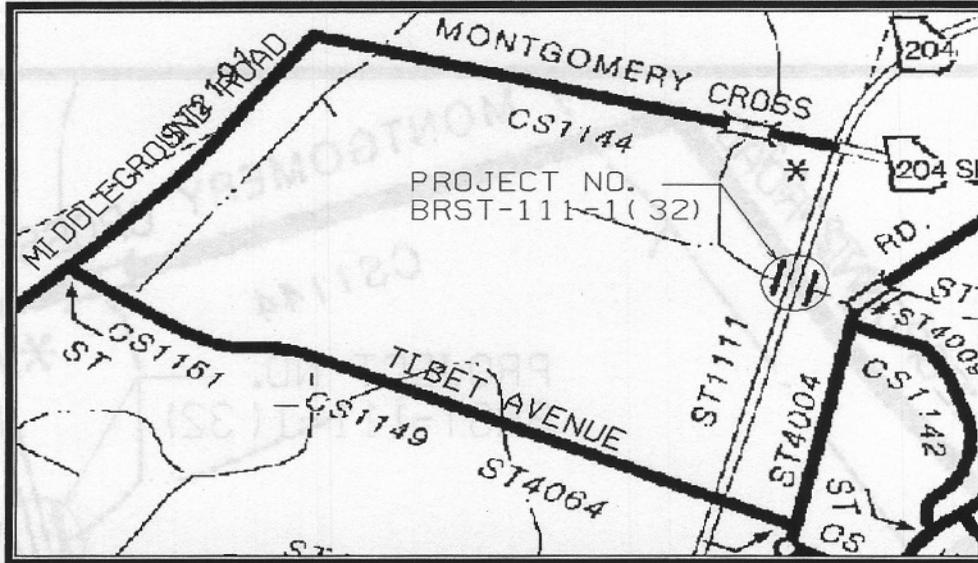
BRST-111-1(32)

CHATHAM COUNTY

P.I. 533200

Federal Route Number: N/A

State Route Number: 204



Culvert Replacement on SR 204/Abercorn Extension @ Harmon Canal

Recommended for approval:

DATE 2/17/05

Carol O. V. Nitz

 Project Manager

DATE 2-17-05

James B. Burk

 State Urban Design Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety and Design Engineer

DATE _____

District Engineer

DATE _____

Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer

Need and Purpose:

BRST-111-1(32) is needed to improve the drainage capacity of the existing culvert located on SR 204/Abercorn Extension at Harmon Canal in Chatham County. The existing culvert is a double 9' by 8' reinforced concrete box culvert. The structure length, measured between the inside faces of the exterior walls and along the centerline of the roadway, for this culvert measures 19.08 feet. The length of the culvert barrel measured along the canal is about 120 feet.

The existing culvert is being improved due to drainage problems with the structure. This culvert is inadequate to receive and pass storm water during intense rainfall events. Chatham County is experiencing drainage problems throughout the county and this culvert improvement will help improve the water flow. This project will improve the efficiency of the culvert, thus satisfying the current hydraulic performance requirements and provide the roadway with necessary protection from expected flood events.

Description of the proposed project:

The project is located in Chatham County on SR 204/Abercorn Extension at Harmon Canal approximately one-quarter of a mile south of the intersection of Montgomery Cross Road and S.R 204. This project consists of constructing a 10'x 8' precast culvert barrel on the south side of the existing double 9' by 8' reinforced concrete box culvert to improve the drainage capacity of the structure. The project length is about 0.419 miles.

Is the project located in Non-attainment area? Yes: No: X

PDP Classification: Major: _____ Minor: X

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

Functional Classification: Urban Principal Arterial

U.S Route Number(s): N/A State Route Number(s): 204

Traffic (AADT):

Current Year (2009): 24500

Design Year (2029): 45000

Existing design features:

- Typical Section: The existing roadway section consists of 6-12 foot lanes with 20 feet raised grass median, 12 feet shoulders, and 30 inches curb and gutter on both sides.
- Posted speed: 45 mph Minimum radius for curve: Tangent
- Maximum super-elevation rate for curve: N/A
- Maximum grade mainline: 0.56 %
- Width of right of way: 130 ft.
- Major structures:
 - Culverts: A double 9' by 8' reinforced concrete box culvert
 - Structure length, measured between the inside faces of the exterior walls and along the centerline of roadway is 19.08 feet.
- Major interchanges or intersections along the project: Montgomery Crossroad @ SR 204 and Tibet Avenue @ SR 204, both located approximately one-quarter of a mile on the north and south of the project respectively.
- The existing length of the project is 0.419 miles and located entirely in Chatham County.

Proposed Design Features:

- Proposed Typical Section(s): No Changes
 - 6 – 12 foot lanes separated by a 20 foot raised grass median with 12 foot shoulders and curb and gutter on both sides
- Proposed Design Speed: 45 mph
- Proposed Maximum grade Mainline: 0.56% Maximum grade allowable: N/A
- Proposed Maximum grade Side Street: N/A Maximum grade allowable: N/A
- Proposed Maximum grade driveway: N/A
- Proposed Minimum radius for curve: Tangent Minimum radius allowable: N/A
- Proposed Maximum super-elevation rate for curve: N/A
- Maximum degree allowable: N/A
- Right of Way:
 - Width: 130 ft.
 - Easement: Temporary (), Permanent (), Utility (X), Other ()
 - Type of access control: Full (), Partial (), By Permit (), Other (X)
 - Number of parcels: 2 Number of displacements:
 - Business: 0
 - Residences: 0
 - Mobile homes: 0
 - Other: 0
- Major structures:
 - Composite double 9' x 8' reinforced concrete box culvert/ Single 10' by 8' reinforce concrete box culvert
 - Length of the composite structure, measured between the inside faces of the exterior walls and along the centerline of the roadway is 30.91'. The length of the proposed 10' by 8' culvert barrel measured along the canal is approximately 125'.

Major interchanges or intersections along the project: Montgomery Crossroad @ SR204, Tibet Avenue @ SR 204

- Traffic control during construction:

Traffic will be maintained on the existing roadway during construction. Traffic will be maintained in a minimum of 2-lanes in each direction at all time during construction. A combination of temporary concrete barrier and striped drums will be used to protect traffic from work area. Construction will be staged to proceed from one end of the culvert to the other. Work will not be performed on both sides of the roadway simultaneously.
- 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 STRUCTURE CAPACITY:	()	()	(X)

Project Number: BRST-111-1(32)

P.I. Number: 533200

County: Chatham

- Design Variances: None
- Environmental concerns: A 404 permit will be required for this project.
- Level of environmental analysis:
 - Are Time Savings Procedures appropriate? Yes (X), No ()
 - Categorical exclusion (X)
 - Environmental Assessment/Finding of No Significant Impact (FONSI) ()
 - Environmental Impact Statement(EIS) ()
- Utility involvements: Utility owners in the area includes;

1. Atlanta Gas and Light Company
2. BellSouth Telecommunications
3. Comcast
4. Savannah Electric & Power Company
5. City of Savannah Water and Sewer

The District 5 Utility Office confirmed that there will be no reimbursable utilities on this project.

Project responsibilities:

- Design - GDOT
- Right of way acquisition – GDOT
- Relocation of utility – City of Savannah
- Letting to contract - GDOT
- Supervision of construction – GDOT
- Providing Material Pits – Contractor
- Providing detours – N/A

Coordination:

- Concept Meeting date and brief summary: 01/20/04
- P. A. R. meetings, dates and results: N/A
- FEMA, USCG, and/or TVA: FEMA Coordination will be handled by the Office of Urban Design
- Public involvement: N/A
- Local government comments: N/A
- Other projects in the area:
 - PI 521505 - Harry S. Truman Phase 4 fm. Montgomery Cross Road to Whitfield Avenue
 - PI 550570 – Middleground Road/ Montgomery Cross Road Fm SR 204 to SR 204
- Other coordination to date: Coordination with USACE Harmon Canal Drainage study, August 1999
- Railroad: N/A

Scheduling – Responsible Parties' Estimate:

- Time to complete the environmental process: 5 Months
- Time to complete preliminary construction plans: 1 Months
- Time to complete right of way plans: 1 Months
- Time to complete the section 404 Permit: 2 Months
- Time to complete final construction plans: 2 Months
- Time to complete to purchase right of way: 6 Month
- Other major items that will affect the project schedule: For optimum stage construction, this project should be let at or near the completion of the project PI 550570, Middleground/Montgomery Cross Road which is estimated at May 31, 2006

Other alternates considered:

1. Due to heavy traffic load on SR 204, tunneling was considered. This was rejected due to lack of vertical clearance with pavement structure.
2. Constructing smaller structures (2 -5' x 8') on each side of the existing culvert was also considered. This had greater right of way impact and increased construction time and therefore was rejected.
3. No build was considered and rejected due to not satisfying the Need and Purpose of the project

Attachments:

1. Cost Estimates
 - a. Construction including E & C
 - b. Right of Way
 - c. Utilities
2. Typical section
3. 8.5' X 11" concept layout
4. Culvert side view
5. Culvert plan view
6. Notice of location and design approval
7. LGPA
8. Concept Meeting Minutes.

ESTIMATE REPORT FOR BRST-111-1(32)

Section ROADWAY SECTION					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	60000	TRAFFIC CONTROL - TRAFFIC CONTROL,	\$ 60,000.00
150-5000	30	EA	433.96	TEMPORARY SAND LOADED	\$ 13,018.80
210-0100	1	LS	355000	GRADING COMPLETE - CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	\$ 355,000.00
441-6222	200	LF	10.66	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	\$ 2,132.00
441-6740	1940	LF	9.02	CONC CURB & GUTTER, 8 IN X 30 IN, TP 7	\$ 17,498.80
610-0355	1976	LF	6.59	REM CONC CURB & GUTTER ALL SIZES	\$ 13,021.84
610-9099	2	LS	2200	REM WINGWALLS & PARAPETS, STA - PRECAST CONCRETE MEDIAN	\$ 4,400.00
622-1033	500	LF	33.56	BARRIER, METHOD 3	\$ 16,780.00
636-5010	30	EA	37.89	DELINEATOR, TP 1	\$ 1,136.70
Section Sub Total:					\$482,988.14

Section TEMPORARY EROSION CONTROL					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	0.06	AC	447.96	TEMPORARY GRASSING	\$ 26.88
163-0240	0.1	TN	193.21	MULCH	\$ 19.32
163-0300	2	EA	1058.42	CONSTRUCTION EXIT	\$ 2,116.84
163-0520	100	LF	11.77	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	\$ 1,177.00
165-0020	200	LF	1.05	MAINTENANCE OF TEMPORARY SILT FENCE, TP B	\$ 210.00
165-0030	100	LF	1.23	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	\$ 123.00
165-0101	2	EA	346.34	MAINTENANCE OF CONSTRUCTION EXIT	\$ 692.68
170-1000	200	LF	11.65	FLOATING SILT RETENTION BARRIER	\$ 2,330.00
171-0020	400	LF	1.67	TEMPORARY SILT FENCE, TYPE B	\$ 668.00
171-0030	300	LF	3.11	TEMPORARY SILT FENCE, TYPE C	\$ 933.00
Section Sub Total:					\$8,296.72

Section CULVERT BARREL					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
207-0203	58.52	CY	33.87	FOUND BKFILL MATL, TP II	\$ 1,982.07
500-3101	234.08	CY	415.22	CLASS A CONCRETE	\$ 97,194.70
511-1000	27744.4	LB	0.62	BAR REINF STEEL	\$ 17,201.53
Section Sub Total:					\$116,378.30

Section TRAFFIC STRIPING					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
653-1501	60	LF	0.25	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	\$ 15.00
653-1502	2168	LF	0.23	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	\$ 498.64
653-3501	626	GLF	0.14	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	\$ 87.64

654-1003	20	EA	3.19	RAISED PVMT MARKERS TP 3	\$	63.80
656-0050	80	LF	0.45	REMOVE EXIST SOLID TRAF STRIPE, 5 IN, THERMOPLASTIC	\$	36.00
656-1050	626	GLF	0.39	REMOVE EXIST SKIP TRAF STRIPE, 5 IN, THERMOPLASTIC	\$	244.14

Section Sub Total: \$945.22

Section TEMPORARY TRAFFIC STRIPING

Item Number	Quantity	Units	Unit Price	Item Description	Cost
632-0003	4	EA	9053.03	CHANGEABLE MESSAGE SIGN, PORTABLE, TYPE 3	\$ 36,212.12
652-6501	2259	GLF	0.07	SKIP TRAFFIC STRIPE, 5 IN, WHITE	\$ 158.13
653-1502	2260	LF	0.23	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	\$ 519.80

Section Sub Total: \$36,890.05

Section PERMANENT BASE AND PAVEMENT

Item Number	Quantity	Units	Unit Price	Item Description	Cost
310-5120	80	SY	13.9	GR AGGR BASE CRS, 12 INCH, INCL MATL	\$ 1,112.00
402-3121	52.8	TN	35.77	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL	\$ 1,888.66
402-3130	19.8	TN	36.65	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY,	\$ 725.67
402-3190	26.4	TN	39.13	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL	\$ 1,033.03
413-1000	10	GL	0.94	BITUM TACK COAT	\$ 9.40

Section Sub Total: \$4,768.76

Section TEMPORARY BASE AND PAVEMENT

Item Number	Quantity	Units	Unit Price	Item Description	Cost
402-3121	349	TN	36.4	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL	\$ 12,703.60
402-3190	116.2	TN	39.13	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL	\$ 4,546.91
413-1000	80	GL	0.94	BITUM TACK COAT	\$ 75.20

Section Sub Total: \$17,325.71

Section PERMANENT EROSION CONTROL

Item Number	Quantity	Units	Unit Price	Item Description	Cost
603-2182	230	SY	42.74	STN DUMPED RIP RAP, TP 3, 24 IN	\$ 9,830.20
603-7000	230	SY	3.55	PLASTIC FILTER FABRIC	\$ 816.50
700-6910	0.2	AC	744.17	PERMANENT GRASSING	\$ 148.83
700-7000	1	TN	57.91	AGRICULTURAL LIME	\$ 57.91
700-8000	1	TN	235.97	FERTILIZER MIXED GRADE	\$ 235.97
700-8100	100	LB	1.43	FERTILIZER NITROGEN CONTENT	\$ 143.00
721-1004	600	SY	35	FABRIC FORMED CONCRETE RIP RAP 4 IN	\$ 21,000.00

Section Sub Total: \$32,232.41

Total Estimated cost \$923,662.47

Subtotal Construction Cost \$916,662.47

E&C Rate 10% \$ 91,666.25

Infl. Rate 0.0% @ 0.0Years \$ -

Total Construction Cost \$ 1,008,328.72

Right Of Way \$ 261,000.00

Relmb. Utilities \$ -

Grand Total project cost \$ 1,269,328.72

Don Brown
Don Brown
Right of Way Administrator
By: Jerry Williams

P.L. Number: 233208
No. Tract: 2

Date: December 14, 2004
Project: BR 21-11-1(2)X
Existing Right of Way: Various
Project Location: SR 21 Williams from Smith Ave. to SR 307
Project Description: SR 21 Williams from Smith Ave. to SR 307

\$ 42,171

2,000

0

22,000

\$ 72,171

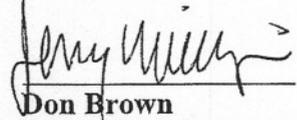
\$ 72,171
41,344
29,209
22,817
\$ 260,994

Per Cost
Scheduling Contingency 25.00
Admin/Over Cost 40.00
Inflation Factor 45.17

\$ 261,000

Total Cost

Preliminary Right of Way Cost Estimate



Don Brown
Right of Way Administrator
By: Jerry Milligan

Date: December 14, 2004
Project: BRST-111-1(32)Chatham
Existing/Required R/W: Varies/Varies
Project Termini: SR 21 Widening from Smith Ave. to SR 307
Project Description: SR 21 Widening from Smith Ave. to SR 307

P.I. Number: 533200
No. Parcels: 2

Land: Commercial : 2,657 sf @ \$ 17.00 / sf \$ 45,171

Improvements : misc. site improvements 5,000

Relocation: Residential (0)
Commercial (0) 0

Damage : Cost to Cure (1) parcel 25,000

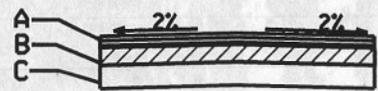
Net Cost \$ 75,171

Net Cost		\$ 75,171
Scheduling Contingency	55 %	41,344
Adm/Court Cost	60 %	69,909
Inflation Factor	40 %	<u>74,570</u>
		\$ 260,994

Total Cost \$ 261,000

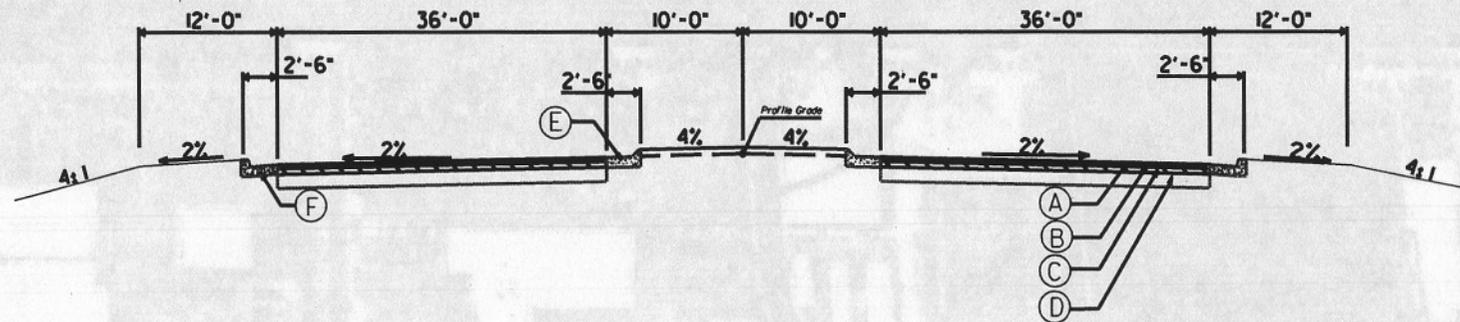
DATE	PROJECT NUMBER	SCALE	NO.
	DIST-111-1132		

**TYPICAL SECTION
APPLIES TO THE TEMPORARY PAVEMENT**



- (A) 165 LB/SY ASPHALTIC CONCRETE 12.5 MM SUPERPAVE
- (B) 220 LB/SY ASPHALTIC CONCRETE 19 MM SUPERPAVE
- (C) 660 LB/SY ASPHALTIC CONCRETE 25 MM SUPERPAVE

**TYPICAL SECTION
APPLIES TO THE ENTIRE PROJECT**

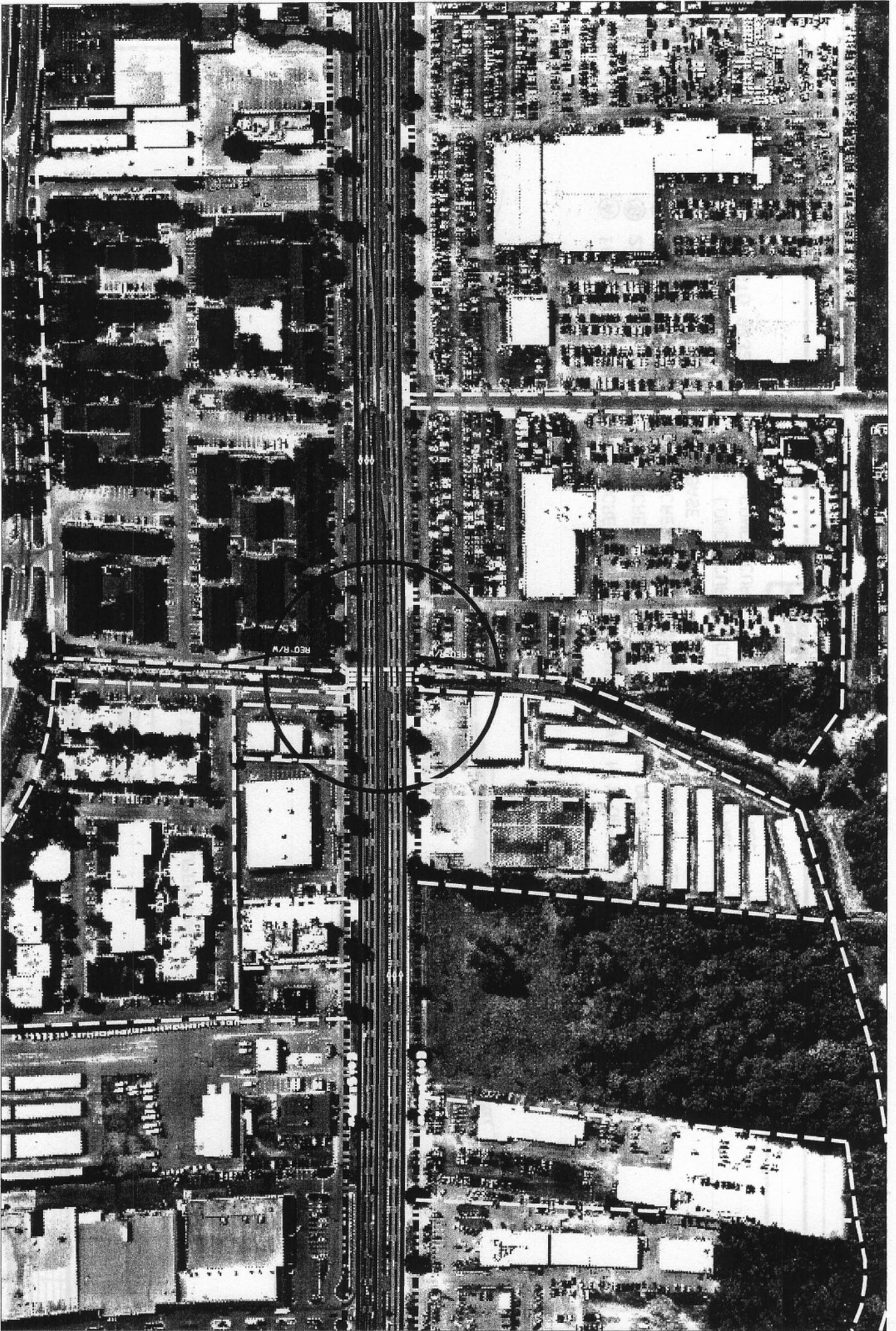


- (A) 165 LB/SY ASPHALTIC CONCRETE 12.5 MM SUPERPAVE MIX DESIGN LEVEL C
- (B) 220 LB/SY ASPHALTIC CONCRETE 19 MM SUPERPAVE MIX DESIGN LEVEL C
- (C) 440 LB/SY ASPHALTIC CONCRETE 25 MM SUPERPAVE MIX DESIGN LEVEL B
- (D) 12" GRADED AGGREGATE BASE
- (E) GA STD 9032-B 8' X 30' CONC. CURB & GUTTER, TYPE 7 FACE
- (F) GA STD 9032-B 8' X 30' CONC. CURB & GUTTER, TYPE 2 FACE

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE OF URBAN DESIGN

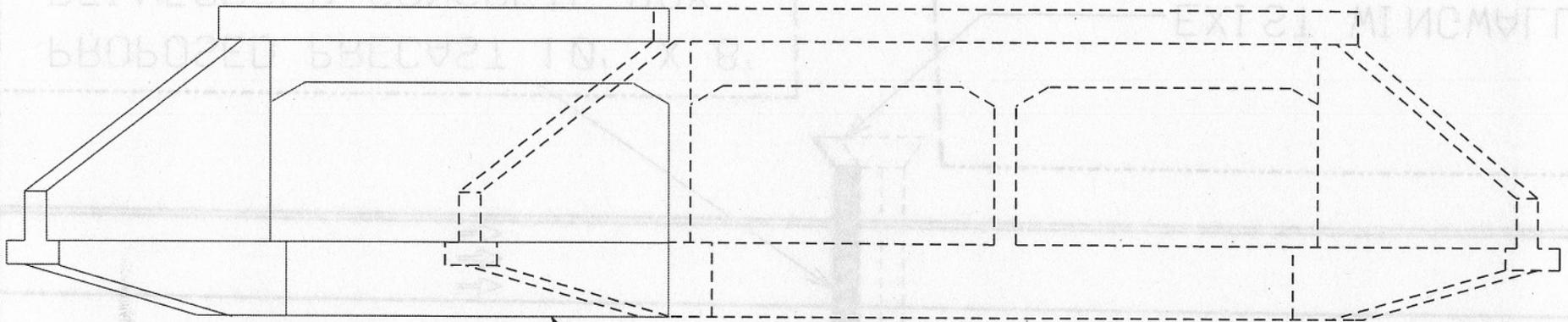
TYPICAL SECTION
S. R. 204/ABERCORN @ HARMON CANAL

DATE
DRAWING NO.



BRST-111-1(32), CHATHAM COUNTY
 SR 204/ABERCORN EXTENSION @ HARMON CANAL
 WEST OF WHITE BLUFF

DATE	PROJECT NUMBER	SCALE	DATE



PROPOSED PRECAST 10' X 8'
 REINFORCED CONCRETE BOX
 CULVERT GDOT STD 2324

EXIST DOUBLE 9' X 8'
 REINFORCED CONCRETE
 BOX CULVERT

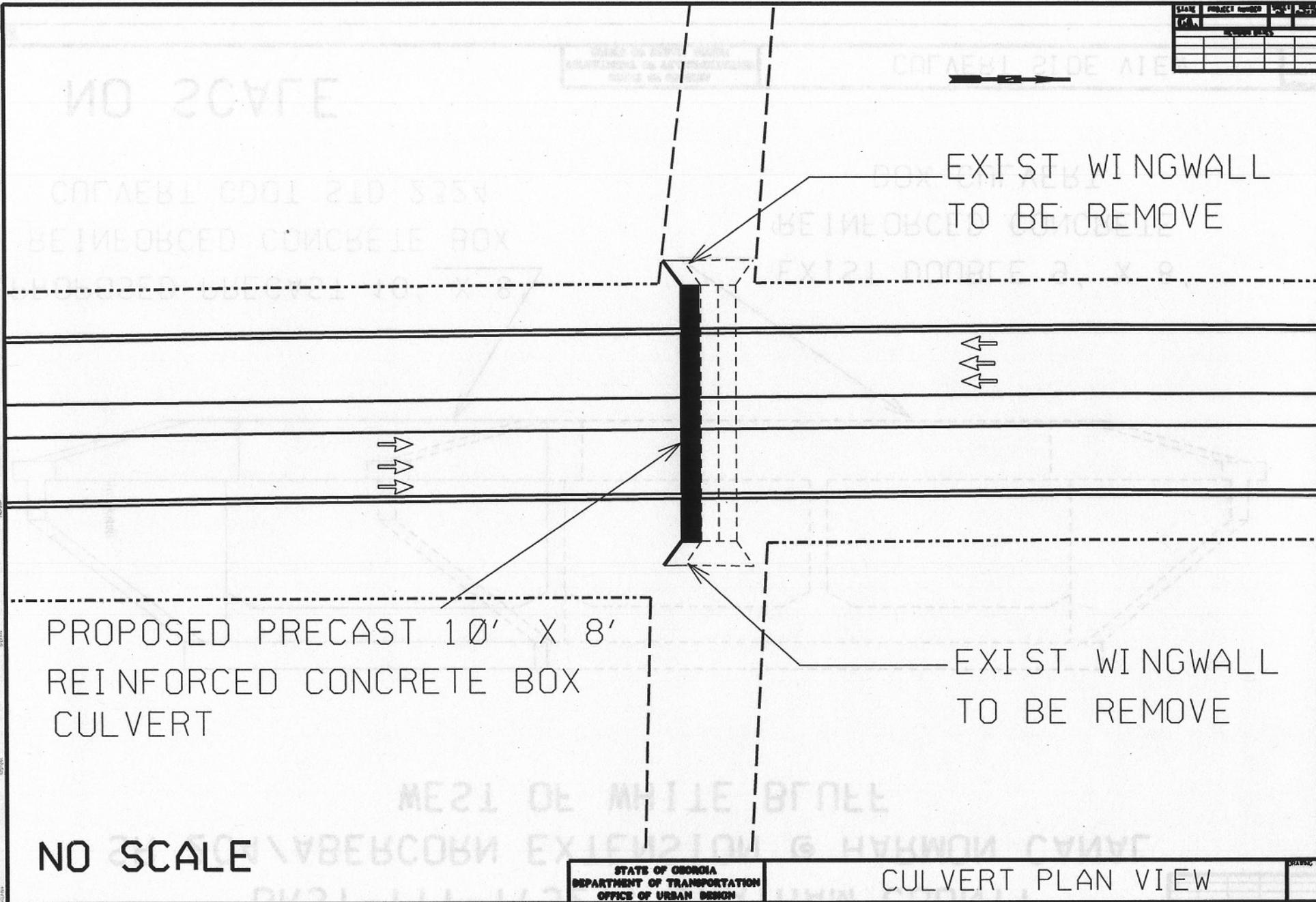
NO SCALE

STATE OF GEORGIA
 DEPARTMENT OF TRANSPORTATION
 OFFICE OF URBAN DESIGN

CULVERT SIDE VIEW

DRAWING NO.

DATE	PROJECT NUMBER	SHEET	TOTAL



PROPOSED PRECAST 10' X 8'
REINFORCED CONCRETE BOX
CULVERT

EXIST WINGWALL
TO BE REMOVE



EXIST WINGWALL
TO BE REMOVE

NO SCALE

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE OF URBAN DESIGN

CULVERT PLAN VIEW

DRAWING NO.

NOTICE OF LOCATION AND DESIGN APPROVAL

BRST-111-1(32), Chatham COUNTY

P. I. No. 533200

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.

Date of Location Design Approval: _____

This project is a drainage improvement project and involves the construction of a 10'x 8' culvert barrel on the south side of the existing double 9'x 8' culvert on SR 204/Abercorn extension over Harmon Canal. The typical section of the roadway within the project area will maintain its current configuration after construction. The project lies entirely within Chatham County and Land District 1.

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

Slade Cole, Acting Area Engineer
Georgia Department of Transportation
630 West Boundary Street
P.O. Box 1212
Savannah, Georgia 31402
(912) 651-2144

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:

James B. Buchan, P.E.
State Urban Design Engineer
E-mail: ben.buchan@dot.state.ga.us
Georgia Department of Transportation
Office of Urban Design
No. 2 Capital Square, Room 356
Atlanta, Georgia 30334-1002
(404) 656-5436

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
#2 Capitol Square, S.W.

Atlanta, Georgia 30334-1002

J. TOM COLEMAN, JR.
COMMISSIONER
(404) 656-5206

FRANK L. DANCHETZ
CHIEF ENGINEER
(404) 656-5277

HAROLD E. LINNENKOHL
DEPUTY COMMISSIONER
(404) 656-5212

BILLY F. SHARP
TREASURER
(404) 656-5224

April 1, 2002

LOCAL GOVERNMENT PROJECT AGREEMENT

In consideration of the proposed improvements, The City of Savannah agrees to provide or perform the following at no cost to the Georgia D.O.T. for project BRST-111-1(32) Chatham Co., PI # 533200-: BRIDGES SR 204/ABERCORN EXTENSION @ HARMON CANAL N OF WHITE BLUFF

- Provide all rights-of-way and/or easements needed for the construction of the project and remove existing structures or obstructions within the rights-of-way.
- Make all utility relocations, adjustments or betterments of publicly owned utilities that are in conflict with construction of this project. Reimburse Georgia D.O.T. for any damages paid to the contractor for delay of construction caused by a delay in relocating the publicly owned utilities.
- Relocate or adjust all privately owned utilities to clear construction of this project, including adjustments at railroad crossings if required.
- Furnish detours, local borrow and waste pits as needed.
- We support this project but choose not to commit any funding, realizing this may delay the project until additional funding can be found.

This 2nd day of April, 2002

APPROVED Michael B. Brown

City/County Official

INITIAL CONCEPT MEETING MINUTES

Project Number: BRST-111-1(32), Chatham County

P.I. Number: 533200

Project Description: SR 204/Abercorne Extension @ Harmon Canal W of White Bluff

Date and Time: January 20, 2004 at 10:00 a.m.

Place: GDOT General Office, Atlanta, Ga. and District 5 Office, Jesup, Ga.

Attendees: Theresa Holder, GDOT Urban Design
Peter Eze, GDOT Urban Design
Stan Petoski, GDOT Traffic and Safety Design
Teresa Scott, GDOT Planning & Programming District 5
Stephen Thomas, GDOT Utilities District 5
Sheree Smart, GDOT Environmental District 5
Tony Collins, GDOT Preconstruction District 5
James L. Brown, GDOT Savannah Area Engineer
Mike Weiner, City of Savannah
Billy Jones, City of Savannah
Don Atwell, City of Savannah

The meeting commenced at about 10:15 a.m. Introductions were made by everyone and Theresa Holder presented an overview of the project. She noted that a project layout was not prepared for the meeting since the Department did not have any aerial photograph of the area. Peter Eze described the project by stating key elements listed in the concept report.

The floor was opened for questions and comments regarding the project.

Existing Roadway Typical Section:

- It was noted that there was an error with the number of lanes listed on the concept report. The existing roadway consists of 6-12' lanes and not 4-12' lanes.

Traffic Volume:

- Mr. Weiner stated that the base year (24,500) and design year (45,000) traffic volumes shown in the concept report were too low. He estimates that current traffic volumes on this section of SR 204 are at least 40,000 vpd.

Response

- The Department (Office of Environmental and Location) reviewed the traffic data for this section of SR/204 and determined that the traffic volumes for the base and design year as stated in the concept report are correct. Most people who currently commute from Southside to Eastside Savannah and vice versa use SR/204 to reach their destinations.

The Department projects that most of these commuters will regularly use Harry S. Truman Parkway when completed to make the same trip, thus decreasing traffic volumes on this section of SR/204 as reflected in the report.

Construction:

- Ms. Holder asked for ideas on stage construction. Mr. Brown suggested that Jacking or Boring be considered for use in the construction of the culvert to minimize impacts on traffic.
- He also suggested that the culvert size be reduced to a 5' by 8' culvert barrel on each side of the existing structure instead of the proposed 10' by 8' culvert barrel in order to reduce right of way impacts.
- Mr. Jones suggested building the invert of the proposed culvert at a higher elevation than the existing culvert. He stated that downstream impacts would have to be considered. Ms. Holder stated hydraulic studies have not been performed on the culvert at this time. She stated that the proposed improvements were based on the recommendations included in a study performed by the U.S. Army Corps of Engineers.

Right-of-way:

- Because of the close proximity of commercial lots to the project, ROW acquisition may be a big issue. Acquiring right of way in the area will be very difficult and expensive and will take at least 12 months to complete.

Environmental:

- Ms. Sheree Smart stated that a NW 23 permit will be required for this project. More information is needed to further investigate environmental impacts on the project.

Utility:

- Comcast does not have any utilities in the project area.
- Other utility companies did not respond to the invitation to the meeting and did not send a representative.
- The city Savannah has a 12" water line, a 10" sanitary sewer line, and fiber optic cable within the project limits.

Harmon Canal:

- The canal will have to be widened in order to add the additional improvements.
- Mr. Jones stated that Thomas & Hutton Engineering Company recently completed a Detention facility for Hunter Army Airfield Base and the study included Harmon Canal.
- The culvert should be design for the 50 year storm frequency.
- An apartment building adjacent to the canal has experienced flooding.
- Several downstream parcels will be acquired by the county.

Public Information Meeting:

- PIM will be decided after the project impact is determined.

Coordination:

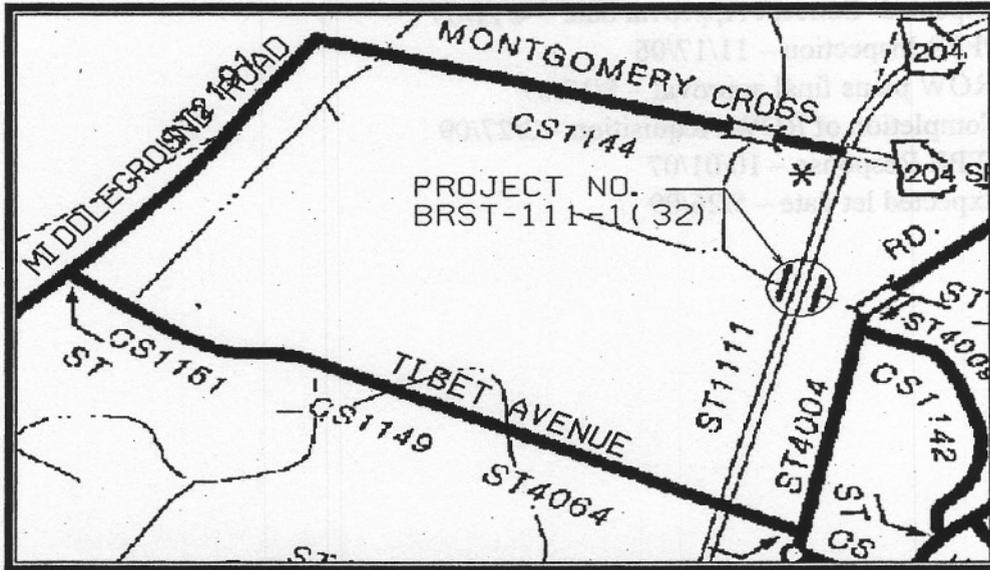
- The City of Savannah will send the Department any information it has related to the canal.

DEPARTMENT OF TRANSPORTATION

Urban Design

PROJECT CONCEPT REPORT

BRST-111-1(32)
CHATHAM COUNTY
P.I. 533200
Federal Route Number: N/A
State Route Number: 204



Culvert Replacement on SR 204/Abercorn Extension @ Harmon Canal

Recommended for approval:

DATE 2/17/05

David O. V. Nitz
Project Manager

DATE 2-17-05

James B. Burk
State Urban Design Engineer

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

DATE _____

State Transportation Planning Administrator

DATE 2-21-05

James D. Dwyer
State Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety and Design Engineer

DATE _____

District Engineer

DATE _____

Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION

Urban Design

PROJECT CONCEPT REPORT

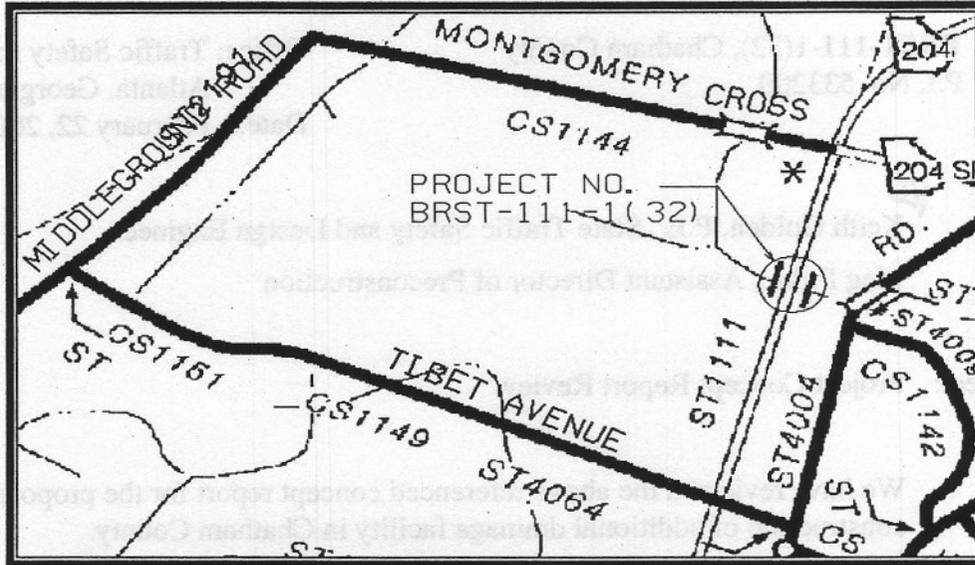
BRST-111-1(32)

CHATHAM COUNTY

P.I. 533200

Federal Route Number: N/A

State Route Number: 204



Culvert Replacement on SR 204/Abercorn Extension @ Harmon Canal

Recommended for approval:

DATE 2/17/05

Camille V. Noto
Project Manager

DATE 2-17-05

James B. Bush
State Urban Design Engineer

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

DATE 2/28/05

Joseph P. Pleda
State Transportation Planning Administrator

DATE _____

State Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety and Design Engineer

DATE _____

District Engineer

DATE _____

Project Review Engineer

DATE _____

State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION
State of Georgia

INTERDEPARTMENTAL CORRESPONDENCE

File: BRST-111-1(32), Chatham County
P.I. No. 533200

Office: Traffic Safety & Design
Atlanta, Georgia
Date: February 22, 2005

From: ^{KG} Keith Golden, P.E., State Traffic Safety and Design Engineer

To: Meg Pirkle, Assistant Director of Preconstruction

Subject: Project Concept Report Review

We have reviewed the above referenced concept report for the proposed construction of additional drainage facility in Chatham County.

The Office of Traffic Safety and Design finds this report satisfactory for approval because it will improve safety and traffic operations within this area.

KG/SZ/nr

Attachment (signature page)

Cc: Harvey Keeper, State Environment /Location Engineer

Paul Liles, State Bridge Engineer

David Mulling, State Review Engineer

Gary Priester, District 5 Engineer

Attn.: Dennis Odom

Joe Palladi, State Transportation Planning Administrator

Jamine Simpson, Financial Management Administrator

James Buchan, State Urban Design Engineer

Attn.: Darryl VanMeter, Urban Design Group Manager

General Files

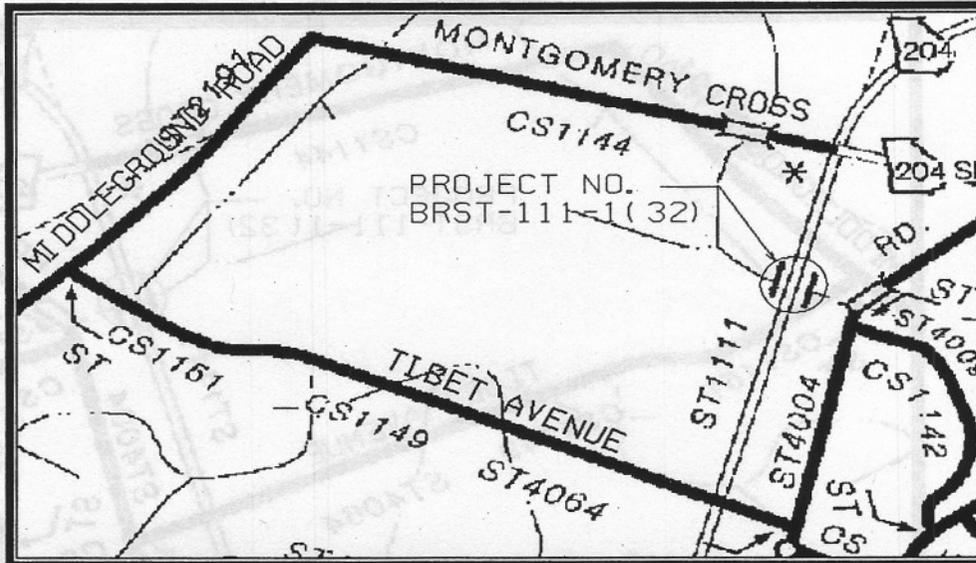
Office Files

DEPARTMENT OF TRANSPORTATION

Urban Design

PROJECT CONCEPT REPORT

BRST-111-1(32)
CHATHAM COUNTY
P.I. 533200
Federal Route Number: N/A
State Route Number: 204



Culvert Replacement on SR 204/Abercorn Extension @ Harmon Canal

Recommended for approval:

DATE 2/17/05

James O. V. ...
Project Manager

DATE 2-17-05

James B. ...
State Urban Design Engineer

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

DATE _____

State Transportation Planning Administrator

DATE _____

State Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE 2-23-05

Theresa ...
State Traffic Safety and Design Engineer

DATE _____

District Engineer

DATE _____

Project Review Engineer

DATE _____

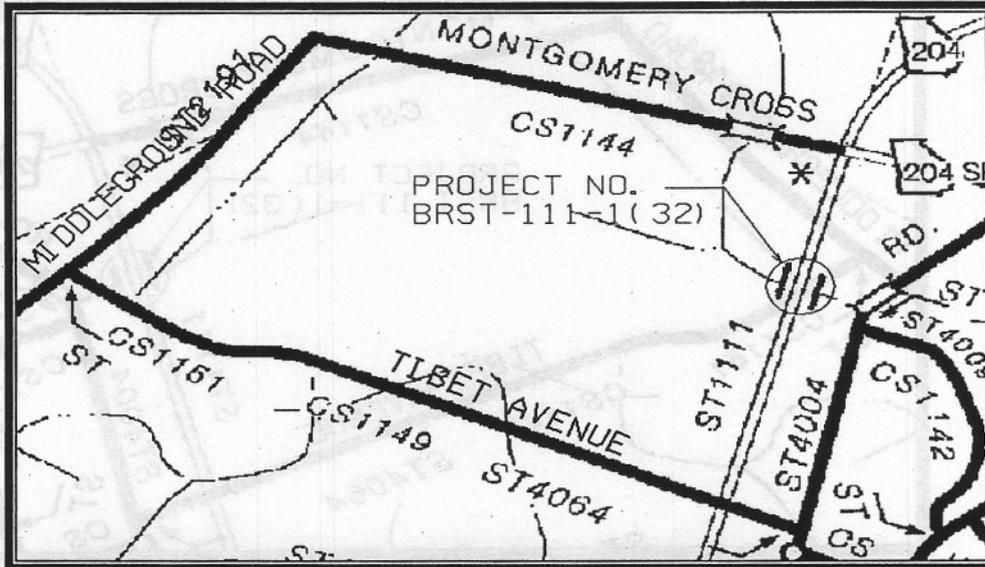
State Bridge and Structural Design Engineer

DEPARTMENT OF TRANSPORTATION

Urban Design

PROJECT CONCEPT REPORT

BRST-111-1(32)
CHATHAM COUNTY
P.I. 533200
Federal Route Number: N/A
State Route Number: 204



Culvert Replacement on SR 204/Abercorn Extension @ Harmon Canal

Recommended for approval:

DATE 2/17/05

Carol O. V. M...
Project Manager

DATE 2-17-05

James B. Burk
State Urban Design Engineer

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

DATE _____ State Transportation Planning Administrator

DATE _____ State Financial Management Administrator

DATE _____ State Environmental/Location Engineer

DATE _____ State Traffic Safety and Design Engineer

DATE _____ District Engineer

DATE _____ Project Review Engineer

DATE 2-28-05 *Paul V. Telle Jr*
State Bridge and Structural Design Engineer