

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP-012-1(71) Bartow County OFFICE Preconstruction
P.I. No. 621350 DATE March 18, 1993

CWH
FROM C. Wayne Hutto, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/se

Attachment

DISTRIBUTION:

John Lively
Robert E. Humphrey
David Studstill
Herman Griffin
Roland Hinnens
Darrell Elwell
George Boulineau
Charles Law
Paul Liles
Marion Waters

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP-012-1(71) Bartow County OFFICE Preconstruction
P.I. No. 621350 DATE February 23, 1993

FROM Hoyt J. Lively, Jr., P. E., Director of Preconstruction

TO Wayne Shackelford, Commissioner

SUBJECT PROJECT CONCEPT REPORT

This project is the widening of SR 20 and SR 61, the relocation of the SR 20 intersection with SR 61, and improvements to the SR 61 and SR 3/US 41 interchange in Bartow County.

SR 20 - From SR 61 to I-75:

The existing roadway consists of 2-12' lanes from SR 61 to just west of I-75 where it widens to 3 lanes with a flush median. There exists 2-12' lanes in each direction separated by a depressed median at I-75. The base year traffic (1996) is 14,700 to 18,400 VPD and the design year traffic (2016) is 24,000 to 29,000 VPD. The posted speed is 55 MPH.

There are 3 alternates proposed with Alternate 3 being the best alternate. It proposes to widen SR 20 to 2-12' lanes in each direction separated by a 20' raised median with curb and gutter on the inside and 10' shoulders on the outside. A section of SR 20 approximately 4000 ft. in length will be constructed on new alignment to relocate the intersection with SR 61 approximately 1200 ft. further north across from CR 629. This relocation will also eliminate a substandard vertical curve on SR 20.

SR 61 - From SR 3/US 41 to CR 629:

The existing roadway consists of 2 lanes at SR 3/US 41 and transitions to 3 lanes and to 4 lanes with a center turn lane at CR 629. The base year traffic (1996) is 12,600 to 23,000 VPD and the design year traffic (2016) is 20,000 to 37,000 VPD. The posted speed is 45 MPH.

SR 61 will be widened to 6 lanes with a 20' raised median and curb and gutter.

SR 61 and SR 3/US 41 Interchange:

The existing interchange consists of a partial diamond and partial cloverleaf configuration with loop ramps in the northeast and southwest quadrants. The existing major structures are: (A) 2 parallel 27.8'x118' bridges on SR 3/US 41 over SR 61 with sufficiency ratings of 76.3; (B) 2 parallel bridges 28'x142' and 28'x140' on SR 3/US 41 over the CSX Railroad with sufficiency ratings of 75.3 and 58.8.

Wayne Shackelford
Page 2
February 23, 1993

STP-012-1(71) Bartow County

The proposed improvement uses a partial diamond interchange and one loop ramp creating a total of five ramps - two of which will separate exiting southbound SR 3/US 41 traffic to SR 61 westbound from traffic headed eastbound on SR 61. The major structures proposed are: (A) Replace the parallel bridges on SR 3/US 41 over SR 61 to provide for six lanes on SR 61 at the interchange; (B) Widen the parallel bridges on SR 3/US 41 over the CSX Railroad to allow for 3 lanes in each direction on SR 3/US 41. Although there are now only 2 lanes in each direction on SR 3/US 41, the proximity of the ramps to the narrow railroad bridges prevents having any acceleration or deceleration lanes. Once these bridges are widened, these lanes can be constructed. Traffic will be maintained on existing roads using staged construction. The design speed is 55 MPH.

Other alternates considered: Alternate 1 relocates the intersection of SR 20 and SR 61 closer than the existing intersection to SR 3/US 41 and realigns three of the SR 3/US 41 ramps across from each other, obliterating the loop ramps causing more congestion. Alternate 2 relocates the SR 20 intersection with SR 61 to CR 629 as in Alternate 3 but realigns all four SR 3/US 41 ramps as a diamond interchange, obliterating the loop ramps and thereby causing more congestion. Neither of these alternates is considered as viable as Alternate 3.

Environmental concerns include requiring an EA be prepared; additional rights-of-way include acquiring 23.8 commercial acres and 10 residential acres; a public hearing will be held; 3 possible UST's exist; time saving procedures are not appropriate.

The estimated costs for this project are:

	<u>Alternate 1</u>	<u>PROPOSED Alternate 2</u>	<u>Alternate 3</u>	<u>APPROVED</u>
Constr(Infl&E/C)	\$4,153,300	\$4,471,121	\$5,004,915	\$2,964,000
Rights-of-way	\$1,467,750	\$2,378,360	\$2,532,700	
Utilities	*\$110,800	*\$835,800	*\$170,800	

*LGPA anticipated

The program date is Long Range. I recommend this project concept be approved for Alternate 3.

HJL/TMR/se

Attachment

CONCUR:

G. C. Lewis
G. C. Lewis

State Highway Engineer

APPROVED:

Wayne Shackelford
Wayne Shackelford
Commissioner

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

RECEIVED
SEP - 3 1991

INTERDEPARTMENT CORRESPONDENCE

STP
 FILE ~~FR~~-012-1 (71) Bartow County OFFICE Atlanta, Georgia
 P.I. No. 621350 DATE August 30, 1991
 Widen SR 20 & Interchange
 FROM Robert E. Humphrey, Project Review Engineer **REHmg**
 TO Hoyt J. Lively, Jr., Director of Preconstruction
 SUBJECT PROJECT CONCEPT REPORT

We have reviewed the attached Concept Report for this Minor project.

We have received signed cover sheets from the following offices:

- Bridge Design
- Traffic and Safety
- Environmental

This report is satisfactory for approval.

The estimated costs of this project are as follows:

	Alt. <u>1</u>	Alt. <u>2</u>	Alt. <u>3</u>
Construction	\$3,433,000	\$3,696,000	\$4,012,000
Inflation (5% per year) x 2 yrs.	343,300	369,600	401,200
E & C (10%)	377,630	406,560	441,320
Preliminary Engineering (5%)	188,820	203,280	220,660
Right of Way	1,467,750	2,378,360	2,532,700
Utilities	110,800	835,800	170,800

REH/jmf

Attachments

c: Felton D. Rutledge

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

RECEIVED

NOV - 6 1991

INTERDEPARTMENT CORRESPONDENCE

FILE FR-012-1(71) BARTOW COUNTY
P.I. No. 621350

OFFICE Cartersville

DATE November 4, 1991

FROM Felton D. Rutledge, District Engineer

TO John Lively, Director of Preconstruction
Atten: Bill Purcell

SUBJECT CONCEPT REPORT

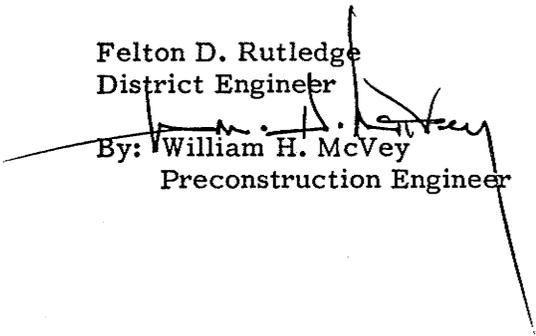
As requested we are attaching the Preliminary Cost Estimates with quantities and unit cost and Typical Section for SR 61 on the above project. The bridge dimensions are as follows:

Bridge over R.R.
Alt. 1,2&3 140'X50' Northbound & Southbound

Bridge over S.R. 61
Alt. 1&2 260'X38' Northbound & Southbound

Alt. 3 295X38 Northbound
295X50 Southbound

Felton D. Rutledge
District Engineer

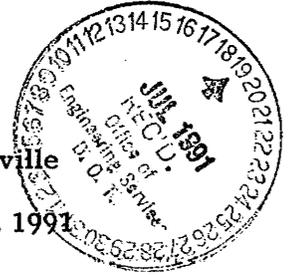
By: 
William H. McVey
Preconstruction Engineer

FDR:WHM:djd

Attachments

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE

OFFICE

Cartersville

DATE

July 17, 1991

FROM

Felton D. Rutledge, District Engineer

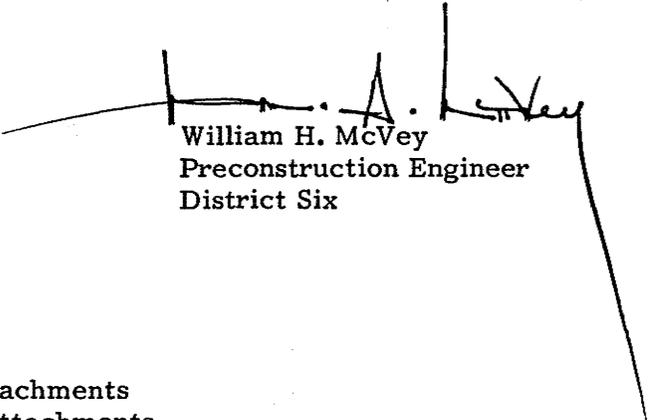
TO

~~Robert Humphrey, Project Review Engineer~~

SUBJECT

FR-012-1(71) BARTOW COUNTY
SR 20 FROM SR 61 TO I-75
INCL. INTERCHANGE @ SR 61 & SR 3
P.I. NO. 621350

Herewith for your review and further handling is the Concept Report covering the subject project.



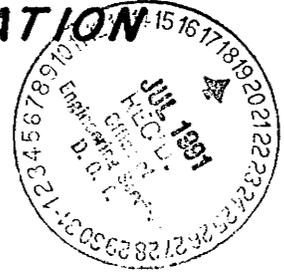
William H. McVey
Preconstruction Engineer
District Six

FDR:WHM:djd

Attachments

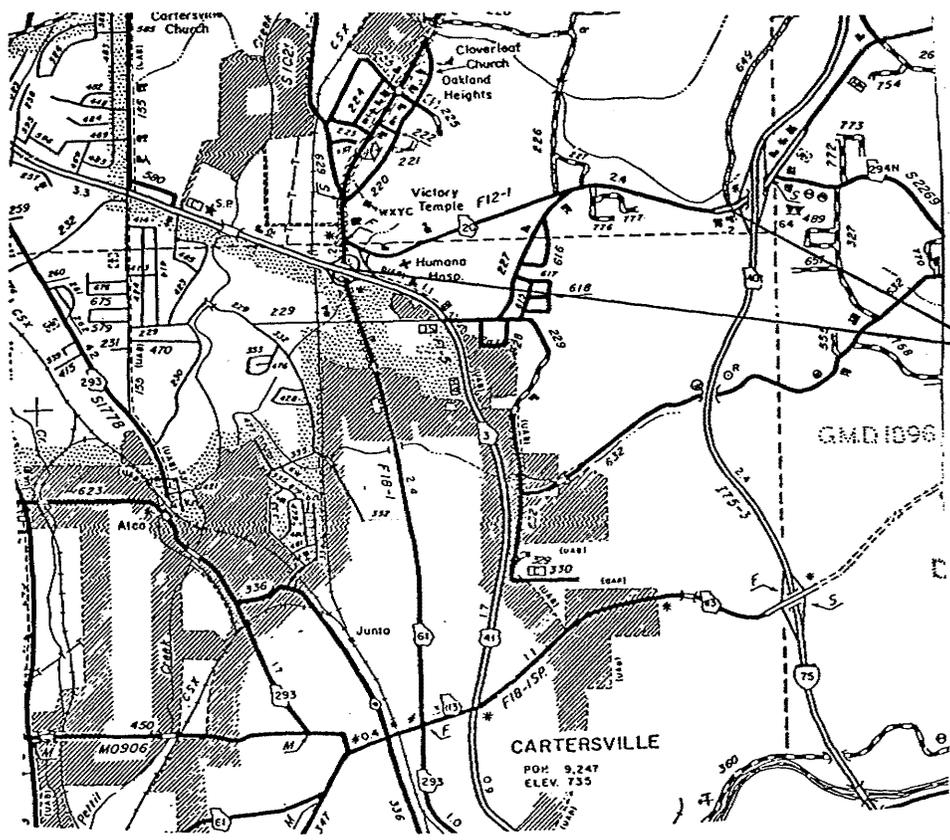
xc: Mr. Wayne Hutto w/Attachments
Mr. David Studstill w/Attachments
Mr. Paul Liles w/Attachments
Mr. Ronald Colvin w/Attachments
Mr. Walker Scott w/Attachments
Mr. Jack Ray w/Attachments
Mr. Frank Penson

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA



PROJECT CONCEPT REPORT SR 20 FROM SR 61 TO I-75 INCL. INTERCHANGE @ SR 61 & SR 3 BARTOW COUNTY FR-012-1(71)

Federal Route No.: F12-1
State Route No.: 20, 61, 3
Ga. D.O.T. P. I. No.: 621350



PROJECT LOCATION

Date Of Report: July 11, 1991

RECOMMENDATION FOR APPROVAL

Date 7-12-91
Date _____
Date _____

Don. H. Miller FR 1 WMO
Project Manager
State Environmental Engineer
State _____ Engineer

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA



PROJECT CONCEPT REPORT

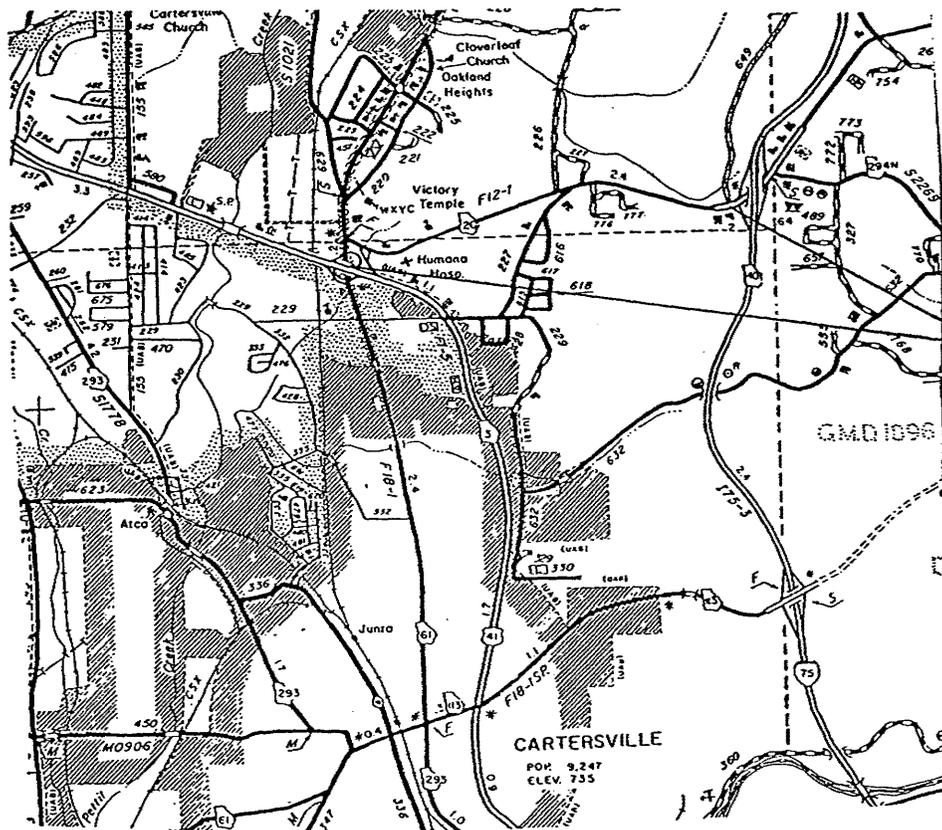
SR 20 FROM SR 61 TO I-75

INCL. INTERCHANGE @ SR 61 & SR 3

BARTOW COUNTY

FR-012-1(71)

Federal Route No.: F12-1
State Route No.: 20, 61, 3
Ga. D.O.T. P. I. No.: 621350



PROJECT LOCATION

Date Of Report: July 11, 1991

RECOMMENDATION FOR APPROVAL

7-12-91
Date
7-29-91
Date
Date

J. M. A. Miller FR 1
Project Manager
[Signature]
State Environmental Engineer
State Engineer

wmd

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE



FILE FR-012-1 (71) Bartow County
P. I. No. 621350, S.R. 20

OFFICE Environment/Location

DATE July 30, 1991

FROM David E. Studstill, P.E., State Environmental/Location Engineer

DES/RB

✓ TO Robert Humphrey, Project Review Engineer

SUBJECT CONCEPT REPORT

The concept report for the above listed project has been reviewed. An environmental assessment will be prepared for this project and not an "EIS" as indicated in the concept report.

If you have any questions, please let me know.

FLD/GAS/gas

cc: Felton D. Rutledge



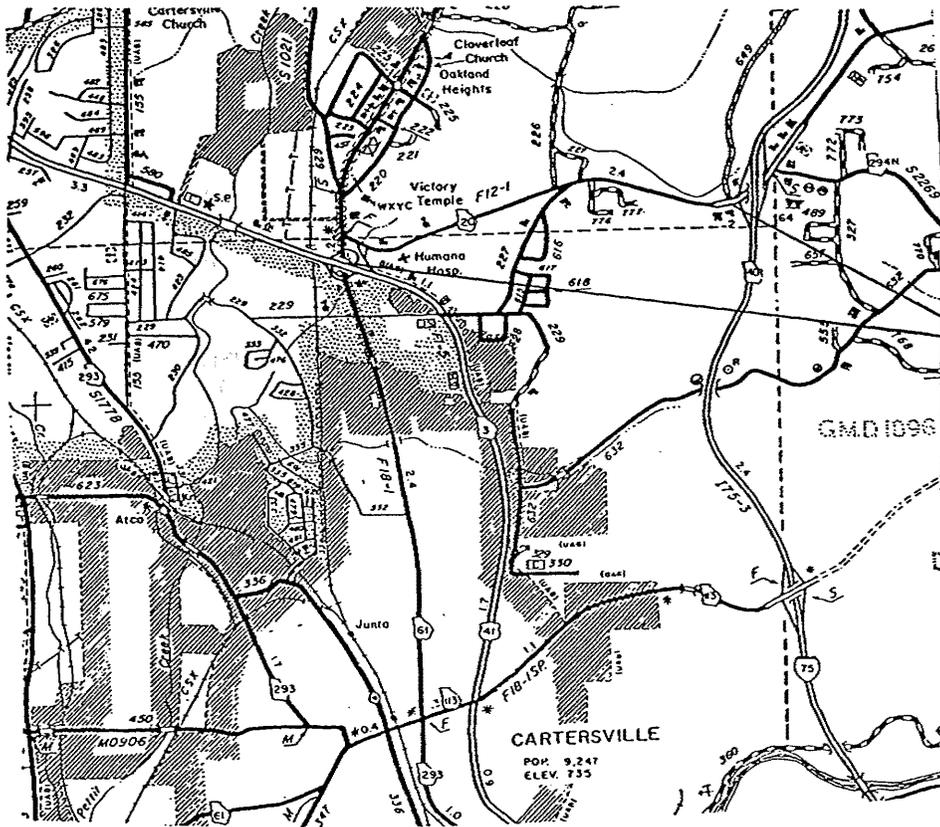
DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA



PROJECT CONCEPT REPORT
SR 20 FROM SR 61 TO I-75
INCL. INTERCHANGE @ SR 61 & SR 3
BARTOW COUNTY
FR-012-1(71)

Federal Route No.: F12-1
State Route No.: 20, 61, 3
Ga. D.O.T. P. I. No.: 621350



PROJECT LOCATION

Date Of Report: July 11, 1991

RECOMMENDATION FOR APPROVAL

7-12-91
Date

John A. Miller FR 1
Project Manager

8/15/91
Date

Don [Signature]
State Environmental Engineer

Date

[Signature]
State Traffic & Safety Engineer

FR-012-1(71) BARTOW COUNTY

Alternate No. 1

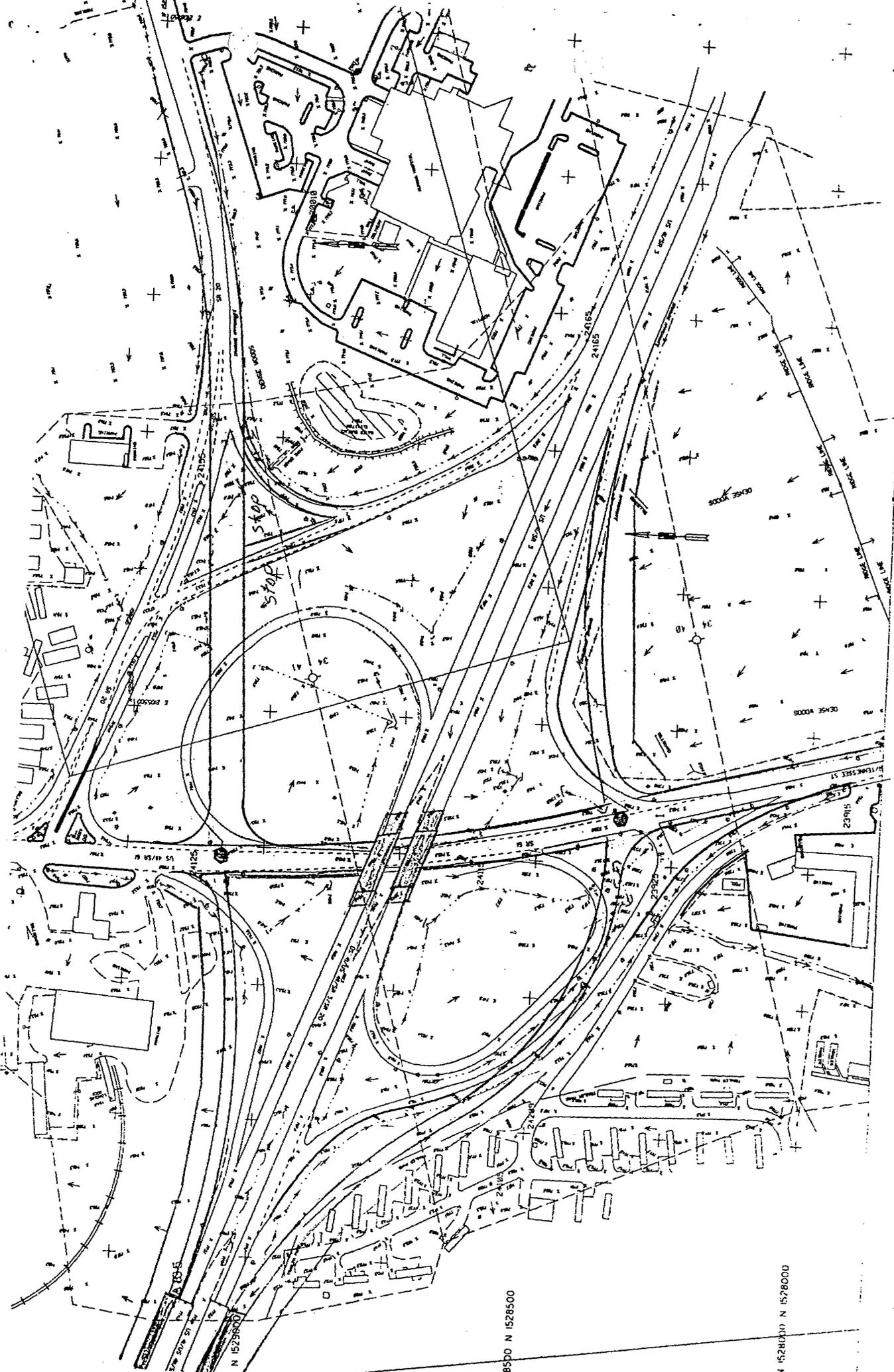
Widen SR 20 to four lanes with 20 ft. raised median using existing lanes as eastbound lane. Construct two lanes and raise median north of existing lanes. Begin construction on SR 20 at intersection of SR 61 and end construction at existing four lane section at I-75 . Reconstruct the interchange at SR 20 and US 41 using a partial diamond design with a short section of SR 20 relocated to intersect with the west bound ramp from SR 61 to US 41. There will be a stop condition at the intersection of the north bound off ramp of US 41 and SR 20.

Traffic signals will be required at the ramps north and south of US 41 on SR 61.

Some relocation of all the ramp will be required.

Relocate the intersection of SR 20 and County Road 227 for a 90° intersection.

Replace the existing bridges over SR 61 to allow for four lane on SR 61. Widen the existing bridges on SR 3 over the CSX Railroad for three lane on SR 3 north and south bound.



1528500 N 1528500

N 1528100 N 1528000

A T W I

FR-012-1(71) BARTOW COUNTY

Alternate No. 2

Widen SR 20 to four lanes with 20 ft. raised median using existing lanes at eastbound lane. Construct two lanes and raised median north of existing lane. Relocate a section of SR 20 (4000 ft.) to intersect SR 61 approximately 700 ft. north of existing location at the intersection of SR 61 and County Road 629. Construction on SR 20 will begin at the intersection of the relocated SR 20, SR 61 and county road 629 and end at the existing four lane section at I-75.

Reconstruct the interchange at SR 20 and US 41 using a diamond interchange design.

Some relocation of the ramps will be required.

Traffic ^{signals?} ~~singles~~ will be required at the ramps north and south of US 41 on SR 61 and at the intersection of SR 20, SR 61 and county road 629.

Replace the existing bridges over SR 61 to allow for four lanes on SR 61. Widen the existing bridges on SR 3 over CSX Railroad to allow for three lane on SR 3 north and southbound.

Relocate the intersection of SR 20 and county road 227 for a 90° intersection.

FR-012-1(71) BARTOW COUNTY

Alternate No. 3

Widen S.R. 20 to four lanes with 20 ft. raised median using existing lanes as eastbound lanes. Construct two lanes and raised median north of existing lane. Relocate a section of S.R. 20 (4000 ft.±) to intersect S.R. 20 approximately ~~1200~~¹²⁰⁰ ft. north of existing location at the intersection of S.R. 61 and County Road No. 629. Construction on S.R. 20 will begin at the intersection of the relocated S.R. 20, S.R. 61 and County Road 629 and at the existing four lane section at I75.

Reconstruct the interchange at S.R. 20 and U.S. 41 using a partial diamond, partial cloverleaf interchange design.

Some relocation of all ramps will be required.

Traffic ^{signals?} singles will be required at the ramps north and south of U.S 41 on S.R. 61 and at the intersection of S.R. 20, S.R. 61 and County Road 629.

Replace the existing bridges over S.R. 61 to allow for six lanes on S.R. 61. Widen the existing bridges on S.R. 3 over CSX Railroad to allow for three lanes on S.R. 3 north and southbound.

Relocate the intersection of S.R. 20 and County Road 227 for a 90° intersection.

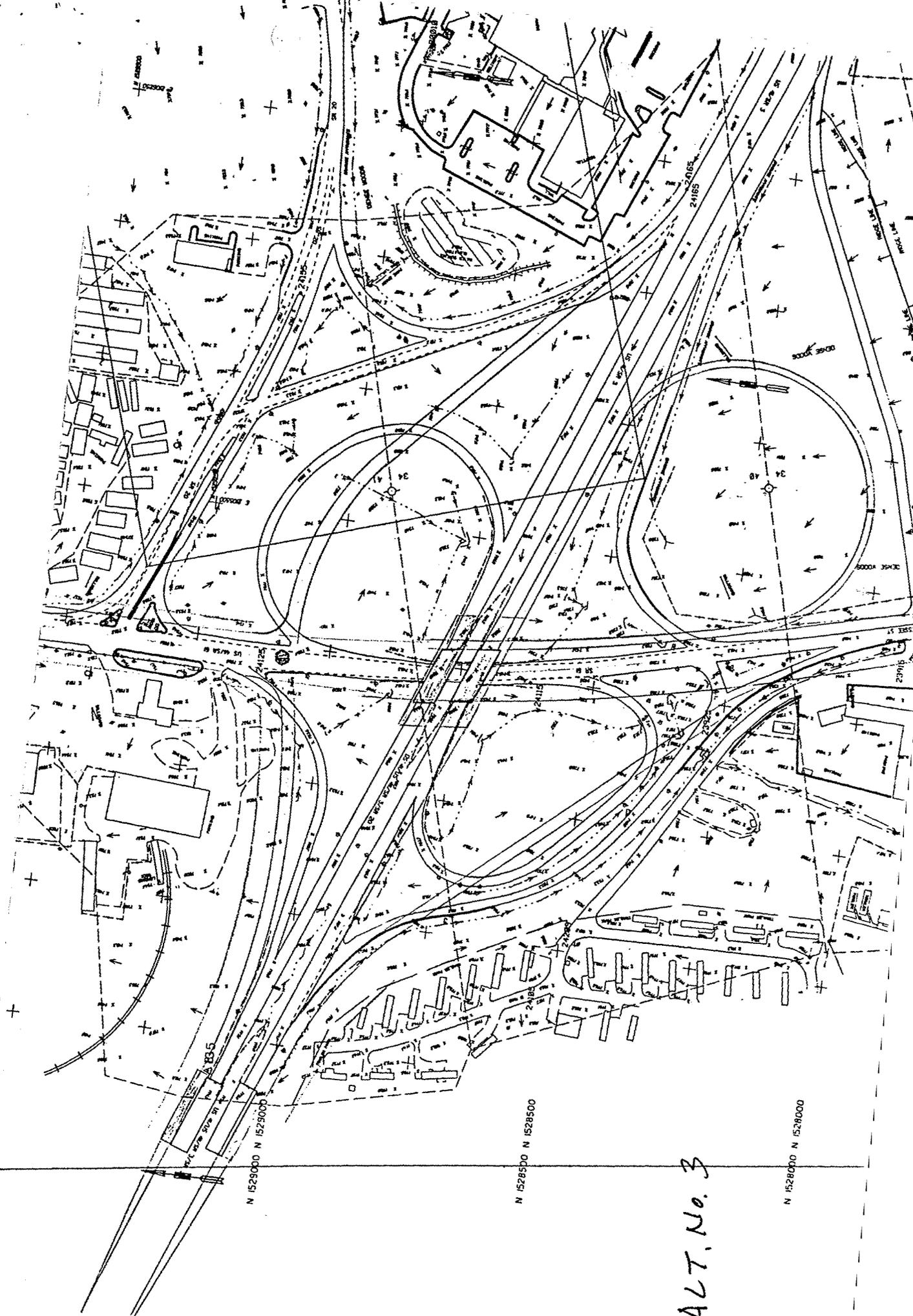
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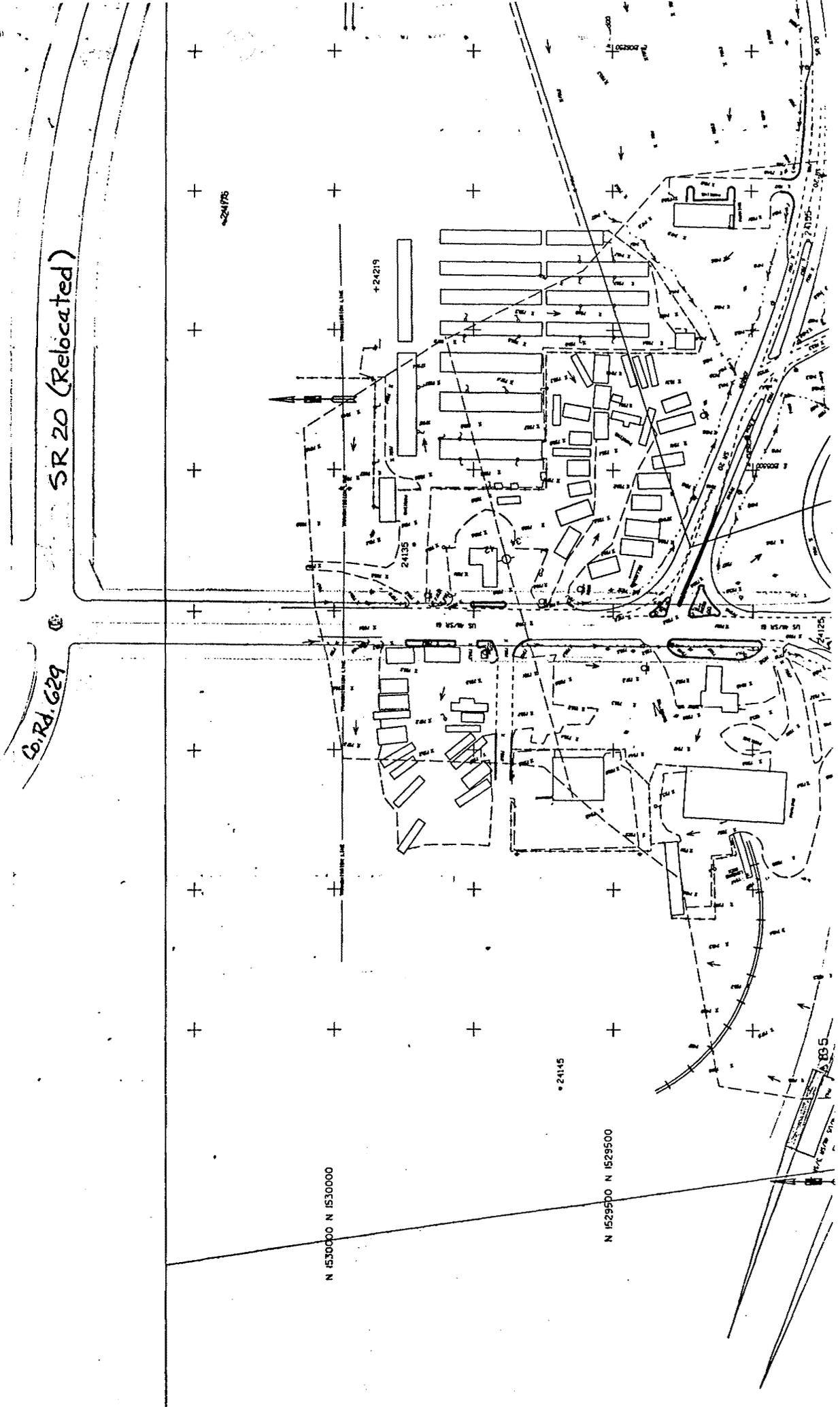
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ALT. No. 3





ALT. No. 3

PROJECT CONCEPT REPORT

DATE: July 11, 1991

PROJECT NUMBER: FR-012-11(71) COUNTY: Bartow

PROJECT NAME: SR 20 from SR 61 to I-75 including SR 3 and SR 61 intersection

P. I. NUMBER: 621350 U.S. ROUTE NO: F12-1 STATE ROUTE NO: 20,61,3

LOCATION

Begin at SR 3, SR 61 interchange end at SR 20 and I-75 interchange 2.3 ± miles

TRAFFIC

YEAR 1995	CURRENT AADT 15700	YEAR 2015	PROJECTED AADT 25000
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PDP CLASSIFICATION

Minor

FUNCTIONAL CLASSIFICATION

Arterial

EXISTING TYPICAL SECTION

2-12' lanes with ± 8 ft. shoulders from SR 61 to County Road 227

POSTED SPEED

45 mph on SR 61
55 mph on SR 20

MAX EXIST DEGREE OF CURVE

6 ° 00'

MAX EXIST GRADE

4.5 %

EXISTING MAJOR STRUCTURES

RANK	N. RTG ¹⁹⁹² S. RTG	FEATURES INTERSECTED	LENGTH	WIDTH
221	76.3 77.8	N. SR 3 over SR 61	118	27.8
702	76.3 77	S. SR 3 over SR 61	118	27.8
214	75.3 79.0	N. SR 3 over R.R.	142	28.0
219	58.8 64.3	S. SR 3 over R.R.	140	28.0

PROJECT NEED: This project is needed to relieve congestion and increase safety in this area.

(See Attachments)

PROJECT CONCEPT REPORT

PROJECT NUMBER: FR-012-1(71)

PROPOSED TYPICAL SECTION

4 - 12 ft. lanes with 20' raised median

DESIGN SPEED

55 mph

MAX DEGREE OF CURVE

ALLOWABLE: 6 ° 00 '
PROPOSED: 6 ° 00 '

MAX GRADE

ALLOWABLE: 4.5 %
PROPOSED: 4.5 %

MAJOR STRUCTURES

See Attachment.

TYPE ACCESS: Free Access (By Permit)

TRAFFIC CONTROL DURING CONSTRUCTION: Traffic will be maintained during
construction using stage construction.

ESTIMATED COST:

CONSTRUCTION: See Attachments

RIGHT-OF-WAY: See Attachments

E & C (10%): "

ACQUIRED BY: "

INFLATION: "
yrs at 5% per yr

UTILITIES: "

ADJUSTED BY: "

TOTAL CONST COST: _____

DISPLACEMENTS: See Attachments

LEVEL OF ENVIRONMENTAL ANALYSIS: ~~EIS~~ Environmental Assessment (See Env/Loc. Comment)

LEVEL OF PUBLIC INVOLVEMENT: Public Hearing

TIME SAVING PROCEDURES APPROPRIATE: _____ YES X _____ NO

DESIGN VARIATIONS REQUIRED: Non Anticipated

PROJECT CONCEPT REPORT

PROJECT NUMBER: FR-012-1(71)

OTHER PROJECTS IN AREA: FR-018-1(51) Bartow County

CONCEPT TEAM MEETING DATE: April 19, 1991

LOCATION INSPECTION DATE: April 19, 1991

PERMITS REQUIRED (4f, COE 404, etc.): _____

UNDERGROUND STORAGE TANKS: UST Investigation has been requested for three locations
within the limits of this project

HAZARDOUS WASTE SITES: None Anticipated

OTHER ALTERNATES CONSIDERED: See Attachment

COMMENTS: District recommends Alt. #3, due to increased level of service, and the seperation
at intersection of SR 20 at 61 & SR 3 @ SR 61.

ATTACHMENTS: Typical Section
Traffic Diagrams
Cost Estimate

NEED AND PURPOSE

FR-012-1(71)

BARTOW COUNTY

The purpose of this project is to widen S.R. 20 to four lanes with a 20 foot raised median from S.R. 61 to I-75 in Bartow County. The project will also involve reconstruction of the interchange at S.R. 20 and U.S. 41. Currently, this section of S.R. 20 is a major access point to I-75 for both the S.R. 20 and S.R. 3 (US 41) corridors.

From a 1985 Origin and Destination Survey, it was discovered that over 60 percent of all through traffic surveyed in the S.R. 20 corridor west of S.R. 3 utilized this segment of S.R. 20 east of S.R. 61 to enter or exit the area. Also, 50 percent of all trucks interviewed entered or exited the area via this segment of S.R. 20 and thus passed through the interchange at S.R. 61. The S.R. 20/S.R. 3/S.R. 61 interchange is of substandard design and contributes to congestion and confusion at the convergence of three of the most heavily traveled routes in Bartow County. The two bridge structures are long enough to allow for only two through lanes of traffic beneath them on S.R. 20/S.R. 61. Entrance and exit ramps are abrupt with no provisions for merging or deceleration and sight distance is poor. Traffic on SR 20 east of the SR 61 interchange ranges from 9,000 to 13,000 vehicles per day on two travel lanes.

This project was recommended in July 1990 comprehensive planning study for Bartow County. Construction of this project should alleviate congestion and improve capacity along this vital corridor. Other projects in the Cartersville area include widening of S.R. 113 between Rockmart (Polk County) and Cartersville (Bartow County), realigning S.R. 113 south of Cartersville along C.R. 636 between Richland Creek and I-75 at the Emerson exit, and the proposed Outer Loop (intersecting S.R. 113 south of Taylorsville in Polk County).

FR-012-1(71) BARTOW COUNTY

PRELIMINARY COST ESTIMATE

Alternate 1

Construction	\$ 3,947,351.00
Right of Way	1,467,750.00
Utilities	643,300.00
Total	\$ 6,058,401.00

Reimbursable

\$ 110,800.00

Alternate 2

Construction	\$ 4,249,412.00
Right of Way	2,378,360.00
Utilities	1,189,300.00
Total	\$ 7,817,072.00

\$ 835,800.00

Alternate 3

Construction	\$ 4,612,987.00
Right of Way	2,532,700.00
Utilities	524,300.00
Total	\$ 7,669,987.00

\$ 170,800.00

FR-012-1(71) BARTOW COUNTY

April 19, 1991 in District Conference Room Concept Meeting

Present:

Dania Apolite	TPI	Environment
John Richard	T.E. II	Env/Loc.
Tom Gissy	R/W Spec. IV	Cartersville R/W
W. Paul Simmons	T.E. II	Ut. Dept. C'ville
Virginia Waldrop	E.T. I	Scheduling
Willliam Darby	T.E. I	Road Design
Jack Ray	T.E. III	Location
Tom Klob	T.E. II	Planning
Dennis Thompson	T.E. II	District
Ross Whatley		
Clarence Brown	Adm.	Bartow Comm. Office
Clarence Walker	City Mgr.	City of Cartersville
Frank Penson	T.E. III	Cartersville
Michael L. Wright	T.E. III	Cartersville
Lori Kennedy	Area Engineer	FHWA
Boyd Pettit	State Representative	Cartersville
Harry Maddox	D.O.T.	Cartersville
Bill McVey	T.E. IV	Preconstruction

Notes:

William Darby described Alternate 1 & 2 including R/W Construction, Utility Cost and Typical Sections.

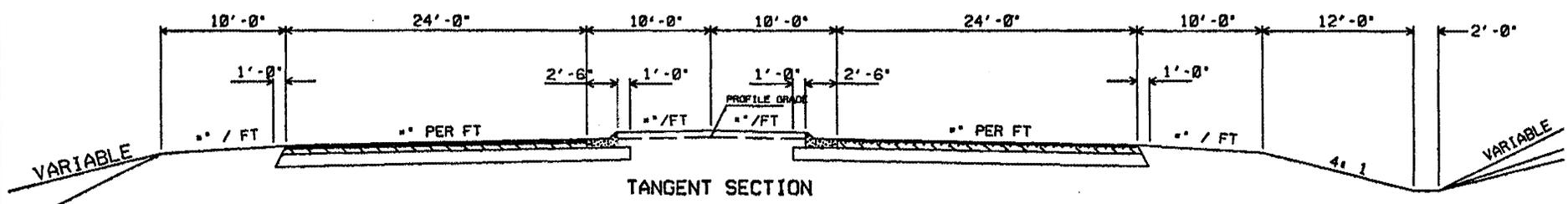
Utility Cost for Alternate 2 was discussed. A power transmission line will be required to be relocated in this alternate.

Access to the hospital was discussed. Access will be provided from U.S. 41 and S.R. 20.

Shifting the relocated intersection of S.R. 20 & S.R. 61 north± 500 ft. to avoid the power transmission line was discussed. This shift is part of Alternate 3.

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA			

S.R.20 BARTOW COUNTY



PRELIMINARY COST ESTIMATE

DATE January 14, 1991

PROJECT FR-012-1(71) BARTOW COUNTY

P. I. NO. 621350

PROJECT DESCRIPTION Alt. No. 1, SR 20 from SR 61 to I-75 including Interchange at SR 61 and SR 3.

PROPOSED CONCEPT Widening and Reconstruction

EXISTING ROAD (If Applicable) _____

TRAFFIC: Existing _____ Design _____

() PROGRAMMING PROCESS (x) CONCEPT DEVELOPMENT () DURING PROJECT DEVELOPMENT

PROJECT COST

A. RIGHT OF WAY		
1. PROPERTY (Land and Easements)		\$ See Attachment
2. DISPLACEMENTS		\$ "
3. OTHER COSTS		\$ "
	SUBTOTAL	\$ "
B. REIMBURSABLE UTILITIES		
1. RAILROAD		\$ 0
2. TRANSMISSION LINES		\$ 0
3. SERVICES		\$ 0
	SUBTOTAL	\$ 0
C. MAJOR STRUCTURES		
1. WALLS		\$
2. BRIDGE STREAM CROSSINGS		\$
3. BRIDGE OVER/UNDERPASS	<u>2,9280' x 50</u>	\$ 1,464,000.00
4. BOX CULVERTS		\$
	SUBTOTAL	\$ 1,464,000.00

D. GRADING AND DRAINAGE

1. EARTHWORK		\$	305,848.00
	<i>153000 cu Yd x \$2.00</i>		
<hr/>			
2. DRAINAGE			
a. Cross Drain Pipes (exc. box culverts)		\$	
b. Curb and Gutter		\$	196,733.00
	<i>24288 LF x \$8.10</i>		
c. Logitudinal System (incl. Catch Basins)		\$	124,000.00
	<i>2800' 50 Pipe x 20' 80 Flared End x 250' 40 Catch Basin x 1200</i>		
		SUBTOTAL	\$ 626,581.00

E. BASE AND PAVING

1. AGGREGATE BASE		\$	386,808.00
	<i>32234 Tons x \$12.00</i>		
<hr/>			
2. ASPHALT PAVING		\$	810,090.00
	<i>27003 Tons x \$30.00</i>		
<hr/>			
3. CONCRETE PAVING		\$	
<hr/>			
4. OTHER		\$	
		SUBTOTAL	\$ 1,196,898.00

F. LUMP ITEMS

1. TRAFFIC CONTROL		\$	50,000.00
	<i>Lump</i>		
<hr/>			
2. CLEARING AND GRUBBING		\$	55,000.00
	<i>50 ACS x \$1100.00</i>		
<hr/>			
3. LANDSCAPING		\$	
<hr/>			
4. EROSION CONTROL		\$	20,000.00
	<i>Lump</i>		
<hr/>			
5. DETOURS (Incl. TEMP. BRIDGES)		\$	
		SUBTOTAL	\$ 125,000.00

G. MISCELLANEOUS

1. LIGHTING		\$	
<hr/>			
2. SIGNING - STRIPING		\$	
<hr/>			
3. GUARDRAIL		\$	20,000.00
	<i>2000' x \$10.00</i>		
<hr/>			
4. OTHER		\$	
		SUBTOTAL	\$ 20,000.00

H. SPECIAL FEATURES

		\$	
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ESTIMATE SUMMARY

A. RIGHT OF WAY	\$ <u>1,467,750.00</u>
B. REIMBURSABLE UTILITIES	\$ <u>110,800.00</u>

CONSTRUCTION COST SUMMARY

C. MAJOR STRUCTURES	\$ <u>1,464,000.00</u>
D. GRADING AND DRAINAGE	\$ <u>626,581.00</u>
E. BASE AND PAVING	\$ <u>1,196,898.00</u>
F. LUMP ITEMS	\$ <u>125,000.00</u>
G. MISCELLANEOUS	\$ <u>20,000.00</u>
H. SPECIAL FEATURES	\$ <u> </u>
SUBTOTAL CONSTRUCTION COST	\$ <u>3,432,479.00</u>
E & C (10%)	\$ <u>343,248.00</u>
INFLATION (5% per year)	\$ <u>171,624.00</u>
TOTAL CONSTRUCTION COST	\$ <u>3,947,351.00</u>

GRAND TOTAL PROJECT COST \$ 5,525,901.00

PRELIMINARY COST ESTIMATE

DATE January 14, 1991

PROJECT FR-012-1(71).BARTOW COUNTY

P. I. NO. 621350

PROJECT DESCRIPTION Alternate No. 2 - SR 20 from SR 61 to I-75.
Including interchange at SR 61 and SR 3

PROPOSED CONCEPT Widening and Reconstruction

EXISTING ROAD (If Applicable) _____

TRAFFIC: Existing _____ Design _____

() PROGRAMMING PROCESS () CONCEPT DEVELOPMENT () DURING PROJECT DEVELOPMENT

PROJECT COST

A. RIGHT OF WAY		
1. PROPERTY (Land and Easements)		\$ See Attachment
2. DISPLACEMENTS		\$ "
3. OTHER COSTS		\$ "
	SUBTOTAL	\$ "
B. REIMBURSABLE UTILITIES		
1. RAILROAD		\$ 0
2. TRANSMISSION LINES		\$ 0
3. SERVICES		\$ 0
	SUBTOTAL	\$ 0
C. MAJOR STRUCTURES		
1. WALLS		\$
2. BRIDGE STREAM CROSSINGS		\$
3. BRIDGE OVER/UNDERPASS	29280' x 750'	\$ 1,464,000.00
4. BOX CULVERTS		\$
	SUBTOTAL	\$ 1,464,000.00

ESTIMATE SUMMARY

A. RIGHT OF WAY	\$ <u>2,378,360.00</u>
B. REIMBURSABLE UTILITIES	\$ <u>835,800.00</u>

CONSTRUCTION COST SUMMARY

C. MAJOR STRUCTURES	\$ <u>1,464,000.00</u>
D. GRADING AND DRAINAGE	\$ <u>626,581.00</u>
E. BASE AND PAVING	\$ <u>1,459,560.00</u>
F. LUMP ITEMS	\$ <u>125,000.00</u>
G. MISCELLANEOUS	\$ <u>20,000.00</u>
H. SPECIAL FEATURES	\$ <u> </u>
SUBTOTAL CONSTRUCTION COST	\$ <u>3,695,141.00</u>
E & C (10%)	\$ <u>369,514.00</u>
INFLATION (5% per year)	\$ <u>184,757.00</u>
TOTAL CONSTRUCTION COST	\$ <u>4,249,412.00</u>

GRAND TOTAL PROJECT COST \$ 7,463,572.00

PRELIMINARY COST ESTIMATE

DATE June 18, 1991

PROJECT FR-012-1(71) BARTOW COUNTY

P. I. NO. 621350

PROJECT DESCRIPTION Alt. No. 3, SR 20 from SR 61 to I-75 including
Interchange at SR 61 and SR 3.

PROPOSED CONCEPT Widening and Reconstruction

EXISTING ROAD (If Applicable) _____

TRAFFIC: Existing _____ Design _____

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

PROJECT COST

A. RIGHT OF WAY

1. PROPERTY (Land and Easements)	\$	<u>See Attachment</u>
2. DISPLACEMENTS	\$	<u>"</u>
3. OTHER COSTS	\$	<u>"</u>
		SUBTOTAL
	\$	<u>"</u>

B. REIMBURSABLE UTILITIES

1. RAILROAD	\$	<u>0</u>
2. TRANSMISSION LINES	\$	<u>0</u>
3. SERVICES	\$	<u>0</u>
		SUBTOTAL
	\$	<u>0</u>

C. MAJOR STRUCTURES

1. WALLS	\$	<u> </u>
2. BRIDGE STREAM CROSSINGS	\$	<u> </u>
3. BRIDGE OVER/UNDERPASS	\$	<u>1,776,000.00</u>
4. BOX CULVERTS	\$	<u> </u>
		SUBTOTAL
	\$	<u>1,776,000.00</u>

35520' x \$5000

D. GRADING AND DRAINAGE

1. EARTHWORK	<u>217500 Cu Yds X \$2⁰⁰</u>	\$ 435,000.00
2. DRAINAGE		
a. Cross Drain Pipes (exc. box culverts)		\$
b. Curb and Gutter	<u>24288 L.F. X 58¹⁰</u>	\$ 196,733.00
c. Logitudinal System (incl. Catch Basins)		\$ 124,000.00
	<u>2800 SD Pipe X 20⁰⁰ 80 Flared End X 250⁰⁰ 40 Catch Basins X 1200⁰⁰</u>	\$ 755,733.00
	SUBTOTAL	\$

E. BASE AND PAVING

1. AGGREGATE BASE	<u>39530 X \$12⁰⁰</u>	\$ 474,360.00
2. ASPHALT PAVING		\$ 985,200.00
3. CONCRETE PAVING	<u>32840 X \$30⁰⁰</u>	\$
4. OTHER		\$
	SUBTOTAL	\$ 1,459,560.00

F. LUMP ITEMS

1. TRAFFIC CONTROL	<u>Lump</u>	\$ 50,000.00
2. CLEARING AND GRUBBING		\$ 55,000.00
3. LANDSCAPING	<u>50 Acs X \$1100⁰⁰</u>	\$
4. EROSION CONTROL	<u>Lump</u>	\$ 20,000.00
5. DETOURS (Incl. TEMP. BRIDGES)		\$
	SUBTOTAL	\$ 125,000.00

G. MISCELLANEOUS

1. LIGHTING		\$
2. SIGNING - STRIPING		\$
3. GUARDRAIL	<u>2000 L.F. X \$10⁰⁰</u>	\$ 20,000.00
4. OTHER		\$
	SUBTOTAL	\$ 20,000.00

H. SPECIAL FEATURES

	\$
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DATE OF ESTIMATE: 1/91

BY: Tom Gissy/Bill Gaines

TYPE ESTIMATE: Concept

PROJECT: FR-012-1 (71) Bartow Alternate #1

P.I. 621350

EXISTING R/W _____ REQUIRED R/W _____

ESTIMATED NUMBER OF PARCELS: _____

PROJECT TERMINI: SR 61/US 411 to I-75

PROJECT DESCRIPTION: Widening of SR 20

TYPE OF LAND USE: Commercial/Residential VALUE APPLIED S.F. BASIS: _____

Highest and Best Use and value applied to each use on a square foot basis.

<u>Commercial - 1 ac. @ 25,000</u>	<u>\$25,000.00</u>
<u>Residential - 14.6 acs. @ 15,000</u>	<u>\$219,000.00</u>
<u>Commercial - 5.2 acs. @ 90,000</u>	<u>\$468,000.00</u>
TOTAL LAND COST:	<u>\$712,000.00</u>

IMPROVEMENTS IMPACTED AND COST: (IF APPLICABLE) _____

(See attached sheet) \$145,500.00

RELOCATION COST: (IF APPLICABLE) \$87,000.00

CONSEQUENTIAL DAMAGES: (IF APPLICABLE) _____

NET COST \$944,500.00

ADM./COURT COST FACTOR 45 % \$428,750.00

INFLATION FACTOR 10% 94,500.00

TOTAL COST \$1,467,750.00

DATE OF ESTIMATE: 1/91 BY: Tom Gissy/Bill Gaines

TYPE ESTIMATE: Concept

PROJECT: FR-012-1 (71) Bartow Alternate # 2

P.I. 621350

EXISTING R/W _____ REQUIRED R/W _____

ESTIMATED NUMBER OF PARCELS: _____

PROJECT TERMINI: SR 61/US 411 to I-75

PROJECT DESCRIPTION: Widening of SR 20

TYPE OF LAND USE: Commercial/Residential VALUE APPLIED S.F. BASIS: _____

Highest and Best Use and value applied to each use on a square foot basis.

<u>Commercial - 1 ac. @ 25,000</u>	<u>\$25,000.00</u>
<u>Residential - 10 acs. @ 15,000</u>	<u>\$150,000.00</u>
<u>Commercial-6 acs. @ 90,000</u>	<u>\$540,000.00</u>
<u>Commercial-13.8 acs. @ 35,000</u>	<u>\$485,000.00</u>
<u>TOTAL LAND COST:</u>	<u>\$1,198,000.00</u>

IMPROVEMENTS IMPACTED AND COST: (IF APPLICABLE) _____
\$150,500.00

RELOCATION COST: (IF APPLICABLE) _____
\$91,600.00

CONSEQUENTIAL DAMAGES: (IF APPLICABLE) _____
\$75,000.00

NET COST \$1,515,100.00

ADM./COURT COST FACTOR 45 % 711,750.00

INFLATION FACTOR 10% 151,510.00

TOTAL COST \$2,378,360.00

Alt #3

DATE OF ESTIMATE 6/91 BY: Tom Gissy

TYPE ESTIMATE: Concept

PROJECT: ~~621350~~ FR-012-1(71) Barton G

P.I. 621350

EXISTING R/W _____ REQUIRED R/W _____

ESTIMATED NUMBER OF PARCELS: _____

PROJECT TERMINI: SR 61/US 411 to I-75

PROJECT DESCRIPTION: Widening of SR 20

TYPE OF LAND USE: Commercial/Residential VALUE APPLIED S.F. BASIS: _____

Highest and Best Use and value applied to each use on a square foot basis.

Commercial - 1 ac. @ \$25,000	\$25,000.00
Residential - 10 acs. @ \$15,000	\$150,000.00
Commercial - 9 acs. @ \$90,000	\$810,000.00
Commercial - 13.8 acs. @ \$35,000	\$1,468,000.00
TOTAL LAND COST:	

IMPROVEMENTS IMPACTED AND COST: (IF APPLICABLE). _____

\$130,500.00

RELOCATION COST: (IF APPLICABLE). \$73,200.00

CONSEQUENTIAL DAMAGES: (IF APPLICABLE) \$75,000.00

NET COST \$1,746,700.00

ADM./COURT COST FACTOR 45 % \$786,000.00

INFLATION FACTOR (None) -0-

TOTAL COST \$2,532,700.00

February 7, 1991

PRELIMINARY UTILITY COST ESTIMATE

FR-012-1 (71) Bartow

(Alt. No. 1) SR. 20 From SR. 61 to I-75 Including Interchange @ SR. 61 & SR. 3

Bartow County Water	16" Water Main D.I. - 7000' @ 22.00 per ft.	154,000.00	
	8" Water Main D.I. - 4500' @ 14.00 per ft.	63,000.00	
	10" Water Main A.C. - 150' @ 16.00 per ft.	2,400.00	
	12" Sewer Line - 5000' @ 18.00 per ft.	90,000.00	
	7- Sewer Manholes @ 1500.00 ea.	10,500.00	
	12" Force Main - 2500' @ 18.00 per ft.	45,000.00	
		<u>\$364,900.00</u>	
City of Cartersville (Water)	6" Water Main C.I. - 1500' @ 12.00 per ft.	18,000.00	
City of Cartersville (Gas)	3" Gas Main Steel - 6400' @ 14.00 per ft.	89,600.00	
	2" Gas Main Steel - 4000' @ 12.00 per ft.	48,000.00	
	1-Regulator Station @ 12,000.00 ea.	12,000.00	
		<u>\$149,600.00</u>	
Southern Bell	56- Wood Poles & Aerial Cables		None Reimburseabl
	50, 100, 200, 300, 400 pairs; 3.2 miles		None Reimburseabl
	1100 pr. Buried Cable		None Reimburseabl
	1200 pr. Buried Cable		None Reimburseabl
	1800 pr. Buried Cable		None Reimburseabl
	18 Fiber Optic Cable		None Reimburseabl
	1- Apparatus Case, 1-Cross Box, &		
	2-Carrier Cabinets (Lump Sum \$100,000.00)		
	By Mike Cornwell, So. Bell Engr.		100,000.00
Georgia Power Co.	3.2 Miles of 3 ph Power Line on So. Bell		None Reimburseabl
	Poles		None Reimburseabl
	8-Wood Poles & 3 ph Power Line		
Cartersville Cable	TV Cable - 5400' @ 2.00 per ft.		10,800.00
*Cost of City/County Utilities usually borne by them. It is not DOT policy to reimburse City or County owned utilities.			
	TOTAL COST BARTOW COUNTY WATER	\$364,900.00	
	TOTAL COST CITY OF CARTERSVILLE (Water)	\$18,000.00	
	TOTAL COST CITY OF CARTERSVILLE (Gas)	\$149,600.00	
	TOTAL COST OF REIMBURSEABLE UTILITIES		\$110,800.00
	TOTAL UTILITY RELOCATION COST	\$643,300.00	

PRELIMINARY UTILITY COST ESTIMATE

FR-012-1 (71) Bartow

(Alt. No. 2) Sr. 20 From SR. 61 to I-75 Including Interchange @ SR. 61 & SR. 3

Bartow County Water	16" Water Main D.I - 2000' @ 22.00 per ft.	44,000.00	
	8" Water Main D.I. - 4500' @ 14.00 per ft.	63,000.00	
	10" Water Main A.C. - 150' @ 16.00 per ft.	2,400.00	
	12" Sewer Line - 5000' @ 18.00 per ft.	90,000.00	
	7- Sewer Manholes @ 1500.00 ea.	10,500.00	
		<u>\$209,900.00</u>	
City of Cartersville (Water)	6" Water Main C.I. - 1500' @ 12.00 per ft.	18,000.00	
City of Cartersville (Gas)	3" Gas Main Steel - 6400' @ 14.00 per ft.	89,600.00	
	2" Gas Main Steel - 2000' @ 12.00 per ft.	24,000.00	
	1-Regulator Station @ 12,000.00 ea.	12,000.00	
		<u>\$125,600.00</u>	
Southern Bell	56- Wood Poles & Aerial Cables		None Reimbursabl
	50, 100, 200, 300, 400 pairs; 3.2 miles		None Reimbursabl
	1100 pr. Buried Cable		None Reimbursabl
	1200 pr. Buried Cable		None Reimbursabl
	1800 pr. Buried Cable		None Reimbursabl
	18 Fiber Optic Cable		None Reimbursabl
	1- Apparatus Case, 1-Cross Box, &		
	2-Carrier Cabinets (Lump Sum \$100,000.00)		
	By Mike Cornwell, So. Bell Engr.		100,000.00
Georgia Power Co.	3.2 Miles of 3 ph Power Line on So. Bell		None Reimbursabl
	Poles		None Reimbursabl
	8-Wood Poles & 3 ph Power Line		
	2- H Frames, 2- 3 Pole Angle, &		
	115 kv Transmission Line		80,000.00
	Replacement R/W Cost 8.6 Acres @		
	75,000.00 per acre		645,000.00
	(R/W Cost by Bill Gaines-R/W Spec. II)		
Cartersville Cable	TV Cable - 5400' @ 2.00 per ft.		10,800.00
*Cost of City/County Utilities usually borne by them. It is not DOT policy to reimburse City or County owned utilities.			
	TOTAL COST BARTOW COUNTY WATER	\$209,900.00	
	TOTAL COST CITY OF CARTERSVILLE (Water)	\$18,000.00	
	TOTAL COST CITY OF CARTERSVILLE (Gas)	\$125,600.00	
	TOTAL COST OF REIMBURSEABLE UTILITIES		\$835,800.00
	TOTAL UTILITY RELOCATION COST	\$1,189,300.00	

June 25, 1991

PRELIMINARY UTILITY COST ESTIMATE

FR-012-1(71) BARTOW

(Alt. No. 3) SR 20 from SR 61 to I-75 including Interchange @ SR 61 & SR 3

Bartow County Water	16" Water Main D.I.-2000'@22.00 per ft.	44,000.00	
	8" Water Main D.I.-4500'@14.00 per ft.	63,000.00	
	10" Water Main A.C.-150'@16.00 per ft.	2,400.00	
	12" Sewer Line-5000'@18.00 per ft.	90,000.00	
	7-Sewer Manholes@ 1500.00 ea.	10,500.00	
		<u>\$209,900.00</u>	
City of Cartersville (Water)	6" Water Main C.I.-1500'@12.00 per ft.	18,000.00	
	36" Water Main D.I.P.-300'	No Conflict	
City of Cartersville (Gas)	3" Gas Main Steel-6400'@14.00 per ft.	89,600.00	
	2" Gas Main Steel-2000'@12.00 per ft.	24,000.00	
	1-Regulator Station @ 12,000.00 ea.	12,000.00	
		<u>\$125,600.00</u>	
Southern Bell	56-Wood Poles & Aerial Cables		
	50,100,200,300,400 pairs; 3.2 miles		None Reimbursable
	1100 pr. Buried Cable		None Reimbursable
	1200 pr. Buried Cable		None Reimbursable
	1800 pr. Buried Cable		None Reimbursable
	18 Fiber Optic Cable		None Reimbursable
	1-Apparatus Case, 1-Cross Box, & 2-Carrier Cabinets (Lump Sum \$100,000.00) By Mike Cornwell, So. Bell Engr.		100,000.00
Georgia Power Co.	3.2 miles of 3ph Power Line on So. Bell Poles		None Reimbursable
	15 Wood Poles & 3ph Power Line		None Reimbursable
	Cost to raise 2-H Frames, & 115kv Transmission Line		60,000.00
Cartersville Cable	TV Cable-5400' @ 2.00 per ft.		10,800.00
*Cost of City/County Utilities usually borne by them. It is not DOT policy to reimburse City of County owned utilities.			
	TOTAL COST BARTOW COUNTY WATER	\$209,900.00	
	TOTAL COST CITY OF CARTERSVILLE (Water)	\$18,000.00	
	TOTAL COST CITY OF CARTERSVILLE (Gas)	\$125,600.00	
	TOTAL COST OF REIMBURSEABLE UTILITIES		\$170,800.00
	TOTAL UTILITY RELOCATION COST	\$524,300.00	

