

City of St. Marys Storm Water Master Plan

Executive Report

J-19462

PREPARED FOR:

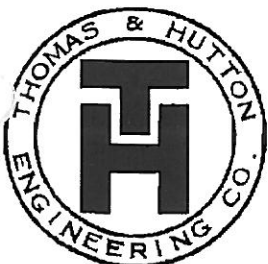
CITY OF ST. MARYS

June 2008

PREPARED BY:

THOMAS & HUTTON ENGINEERING CO.

**SAVANNAH, GEORGIA ♦ BRUNSWICK, GEORGIA
CHARLESTON, SOUTH CAROLINA ♦ MYRTLE BEACH, SOUTH CAROLINA
WILMINGTON, NORTH CAROLINA**





CITY OF ST. MARYS, GEORGIA

June 9, 2008

PUBLIC HEARING
Comprehensive Plan Community Agenda
5:30 p.m.

PUBLIC HEARING
"Silver Star Steakhouse, Inc. Alcohol License"

CITY COUNCIL MEETING
6:00 p.m.

AMENDED AGENDA

- I. **CALL TO ORDER**
- II. **INVOCATION:** *Councilmember Deborah Hase*
- III. **PLEDGE OF ALLEGIANCE**
- IV. **ROLL CALL** **QUORUM: YES___ NO___**
- V. **APPROVAL OF MINUTES:** *May 12, 2008 Regular City Council Meeting Minutes*
May 12, 2008 Water and Sewer Committee Meeting Minutes
May 14, 2008 Property Committee Meeting Minutes
May 19, 2008 Public Safety-Police Committee Minutes

PRESENTATION:

BOARDS AND AUTHORITY APPOINTMENTS

1. **DOWNTOWN DEVELOPMENT AUTHORITY:** *One Seat*
2. **ORANGE HALL FOUNDATION:** *Four Seats*
3. **HOSPITAL AUTHORITY:** *One Seat*
4. **SR. DEPARTMENT ADVISORY COMMITTEE:** *One Seat*

STORMWATER MASTER PLAN: *Thomas and Hutton*

SPUR 40 ANNEXED AREA SEWER EXTENSION CONCEPT PLAN: *Thomas and Hutton*

BRAND CAMPAIGN: *Steve Carey with Georgia Technology Authority*

SIGNATURE COMMUNITY UPDATE: *Alyce Thornhill (POSTPONED)*

FINANCE DIRECTOR'S REPORT: *Jennifer Brown*

APPROVAL OF THE AGENDA

VI. GRANTING AUDIENCE TO THE PUBLIC:

VII. OLD BUSINESS:

- A. PROPOSED FY 09 BUDGET ORDINANCE (POSTPONED FROM 5/12/08)....TAB "A"
- B. NEW ALCOHOL LICENSE: Silver Star Steakhouse, Inc.....TAB "B"

VIII. NEW BUSINESS:

- A. CUMBERLAND COVE'S REQUEST: Discussion.....TAB "C"
- B. SAIL COVE'S REQUEST: Discussion.....(POSTPONED).....TAB "D"
- C. BLUE WATER PROMOTION'S REQUEST: Discussion.....TAB "E"
- D. UTILITIES ORDINANCE AMENDMENT: Water & Sewer Rates.....TAB "F"
- E. THOMAS AND HUTTON TASK ORDER:.....TAB "G"
Design of Sewer Extension for Spur 40Annexed Area
- F. JUNE 23RD CITY COUNCIL MEETING: GMA Conference-Cancellation/Reschedule
- G. BUDGET ORDINANCE INSURANCE FUNDS: Vehicle.....TAB "H"
- H. BUDGET ORDINANCE COASTAL INCENTIVE GRANT AWARD:.....TAB "I & J"
Multi-Grant & General Funds
- I. ORDINANCE AMENDMENT: City Council Salaries.....TAB "K"
- J. BRAND CAMPAIGN RESOLUTION.....TAB "L"
- K. EMPLOYMEE INCENTIVE PROGRAM: Grant Administrator.....TAB "M"
- L. CAMDEN CHILDREN'S ALLIANCE & RESOURCES, INC.: M.O.A.....TAB "N"
- M. BUDGET ORDINANCE: Year End.....TAB "O"
- N. SENIOR MEALS CONTRACT.....TAB "P"
- O. LANDSCAPE CONTRACT.....TAB "Q"
- P. ADVERTISING NEW ALCOHOL LICENSE:.....TAB "R"
Patco Energy Express LLC (Cisco)
- Q. HOMESTEAD EXEMPTION FORM: Discussion.....(REMOVED).....TAB "S"
- R. GOLF CART USAGE IN WATER DEPARTMENT:(POSTPONED)TAB "T"
- S. ST. MARYS COMMERCIAL PROPERTY ASSESSMENTS: Councilmember Trader
(ADDED)

IX. REPORT OF AUTHORITIES, BOARDS, COMMISSIONS & COMMITTEES:

- A. LIBRARY BOARD TERM EXPIRATIONS ANNOUNCEMENT: Two Seats
- B. PROPERTY COMMITTEE REPORT.....TAB "U"
 - 1. LAND'S END SUBDIVISION: Street Light
 - 2. DDA BOUNDARIES MAP
 - 3. CITY OF KINGSLAND REQUEST: Right-of-Way and Ingress/egress onto Winding Road
 - 4. CATHOLIC CHURCH & METHODIST CHURCH REQUEST: Street Lights
 - 5. SALT WATER FISHERMAN SIGN: Wheeler Street and Boat Ramp
 - 6. REZONING: Temothy MacDonell requests rezoning of 22 acres located at Colerain Road and Spur 40, Tax Map 134A 001, from R-3 to PD.
(POSTPONED FROM 5/12/08)
- C. PUBLIC SAFETY-POLICE COMMITTEE REPORT.....TAB "V"

1. ALCOHOL ORDINANCE
2. TAXI ORDINANCE

D. WATER AND SEWER COMMITTEE REPORT.....TAB "W"

1. BRANT CREEK: DEVELOPER'S AGREEMENT

E. BOARD OF ETHICS COMMITTEE REPORT.....TAB "X"

X. REPORT OF MAYOR:

XI REPORT OF CITY MANAGER:

XII. GRANTING AUDIENCE TO THE PUBLIC

XIII. EXECUTIVE SESSION: *Real Estate & Personnel Legal* (ADDED)

XIV. ADJOURNMENT:

City of St. Marys Storm Water Master Plan

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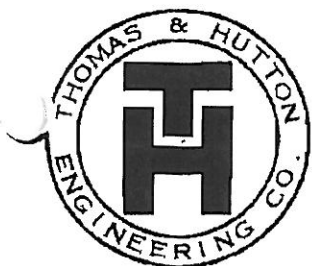
CITY OF ST. MARYS

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St. Mary's Storm Water Master Plan Executive Report

The City of St. Marys is a thriving community located in Camden County, Georgia. As of July 2006, the population of St. Marys was approximately 16,000 residents. To assist in sound flood plain management, safety, and harmonious growth with the neighborhoods, Thomas & Hutton Engineering Co was contracted to provide a comprehensive Storm Water Master Plan which identified drainage problem areas and recommended improvements to alleviate flooding during a 25 year storm. Hurricanes were not considered in the evaluation, since St Marys will likely be inundated with a tidal surge from a Category V Hurricane.



As part of the City's Storm Drainage Master Plan, Thomas & Hutton Engineering Co prepared a comprehensive Storm Drainage Inventory Map. As shown on the inventory map there is over 96,000 feet (18 miles) of existing storm pipe in the City of St. Marys. Included in the inventory maps are the recommended drainage improvements. These proposed modifications need to be implemented to allow flood protection for a 25 year storm. The recommended improvements are only schematic and thus, prior to implementing the improvements, a detailed field survey and design needs to be performed to provide the City and land owners with the most cost effective and practical solution to the problem. To further identify the recommended improvements, schematic exhibits have been created with engineer's opinion of cost.



Over 52 individual projects were recommended. The total cost of the drainage improvements is \$6.9 million in current dollar value. The improvements may be performed all at once or phased. As part of the Project List and Cost, you will find a Priority Number associated with each project. Priority 1 is recommended for the Drainage Improvements along the major outfalls which have an impact on the overall drainage system. Priority 1 improvement costs are estimated at approximately \$4 million. Priority 1 is recommended to be performed immediately. Priority 2 improvements typically apply to secondary drainage which attaches to the major outfalls. Priority 2 improvements cost are estimated at \$0.7 million. These projects

are recommended to be completed after Priority 1 projects. Priority 3 projects are identified as localized problems and their cost is estimated at \$2.2 million. It should be pointed out that the pipe material integrity was not investigated and in many places, the piping is unserviceable and requires replacement for safety reasons. In these situations or when area rehabilitation occurs, it is recommended to review the proposed drainage improvements and implement the improvements during the rehabilitation process.

Typical funding for these projects may come from General Funds, Special Assessments, Bonds, SPLOST, Grants, Dedications, Development Fees and Storm Water Utility. Implementing any funding mechanism is a delicate undertaking. Recall that in the past, the means by which the public is informed about the improvements and costs, and the amenities included in the plan, has a great deal to do with the way the public responds.

We understand the City currently spends approximately \$3 million for CIP every 5 years. Utilizing the full \$3 million for the recommended drainage improvements will require the proposed improvements being phased over a 12 year period of time.

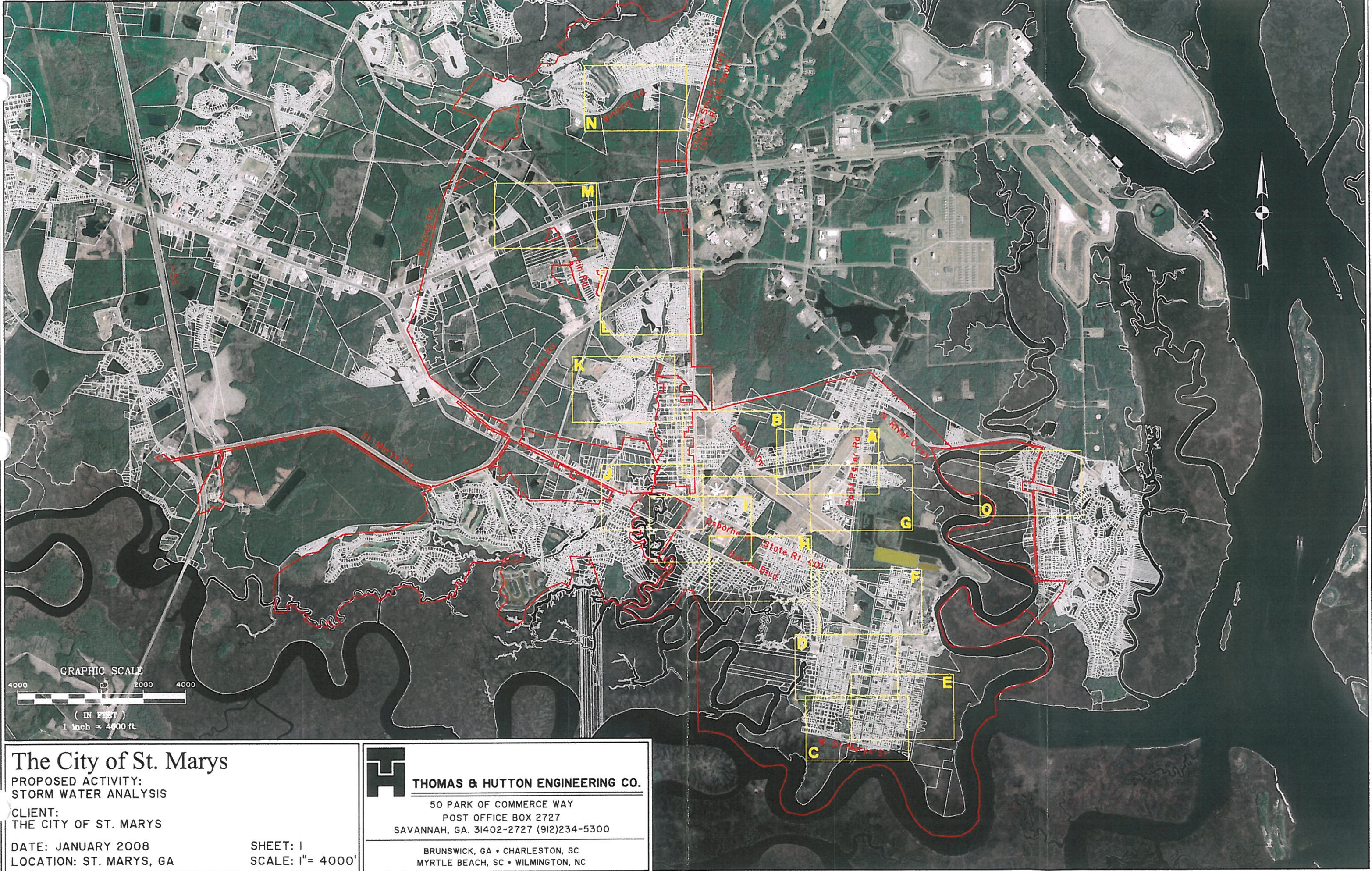
To conclude the summary, the importance of a maintenance program cannot be underestimated. It is recommended that the existing year round maintenance program to keep ditches, culverts, and flap gates at optimum efficiency be continued and improved. Presently, there are numerous pipes which are clogged with sediment or crushed, and many ditches which are overgrown with grasses and small trees. These bottlenecks must be removed and maintained clear of any obstacles for the drainage facility to be used to its fullest capacity.

UNIT PRICES FOR SAINT MARYS OPINION OF COST

Item	Cost	Unit
Demolition for each pipe area	\$ 10,000.00	LS
15" RCP	\$ 40.00	LF
18" RCP	\$ 50.00	LF
24" RCP	\$ 60.00	LF
30" RCP	\$ 70.00	LF
36" RCP	\$ 80.00	LF
42" RCP	\$ 120.00	LF
48" RCP	\$ 130.00	LF
54" RCP	\$ 150.00	LF
60" RCP	\$ 200.00	LF
19x30 elliptical pipe	\$ 60.00	LF
24x38 elliptical pipe	\$ 86.00	LF
27x42 elliptical pipe	\$ 100.00	LF
29x45 elliptical pipe	\$ 125.00	LF
32x49 elliptical pipe	\$ 150.00	LF
34x53 elliptical pipe	\$ 163.00	LF
38x60 elliptical pipe	\$ 200.00	LF
43x68 elliptical pipe	\$ 276.20	LF
Double 4'x6' box culvert and wingwalls	\$ 4,000.00	LF
Double 4'x8' box culvert and wingwalls	\$ 5,000.00	LF
Double 4'x9' box culvert and wingwalls	\$ 5,600.00	LF
Double 5'x10' box culvert and wingwalls	\$ 6,500.00	LF
Inlet	\$ 3,500.00	EA
Connect pipes to existing inlets	\$ 3,500.00	EA
Rip Rap	\$ 150.00	SY
Remove and replace asphalt and base	\$ 40.00	SY
Remove and replace curb and gutter	\$ 40.00	LF
Remove and replace concrete driveway	\$ 75.00	SY
Remove and replace concrete sidewalk	\$ 10.00	SF
Ditch Excavation	\$ 100.00	LF

Opinions of Probable Costs:

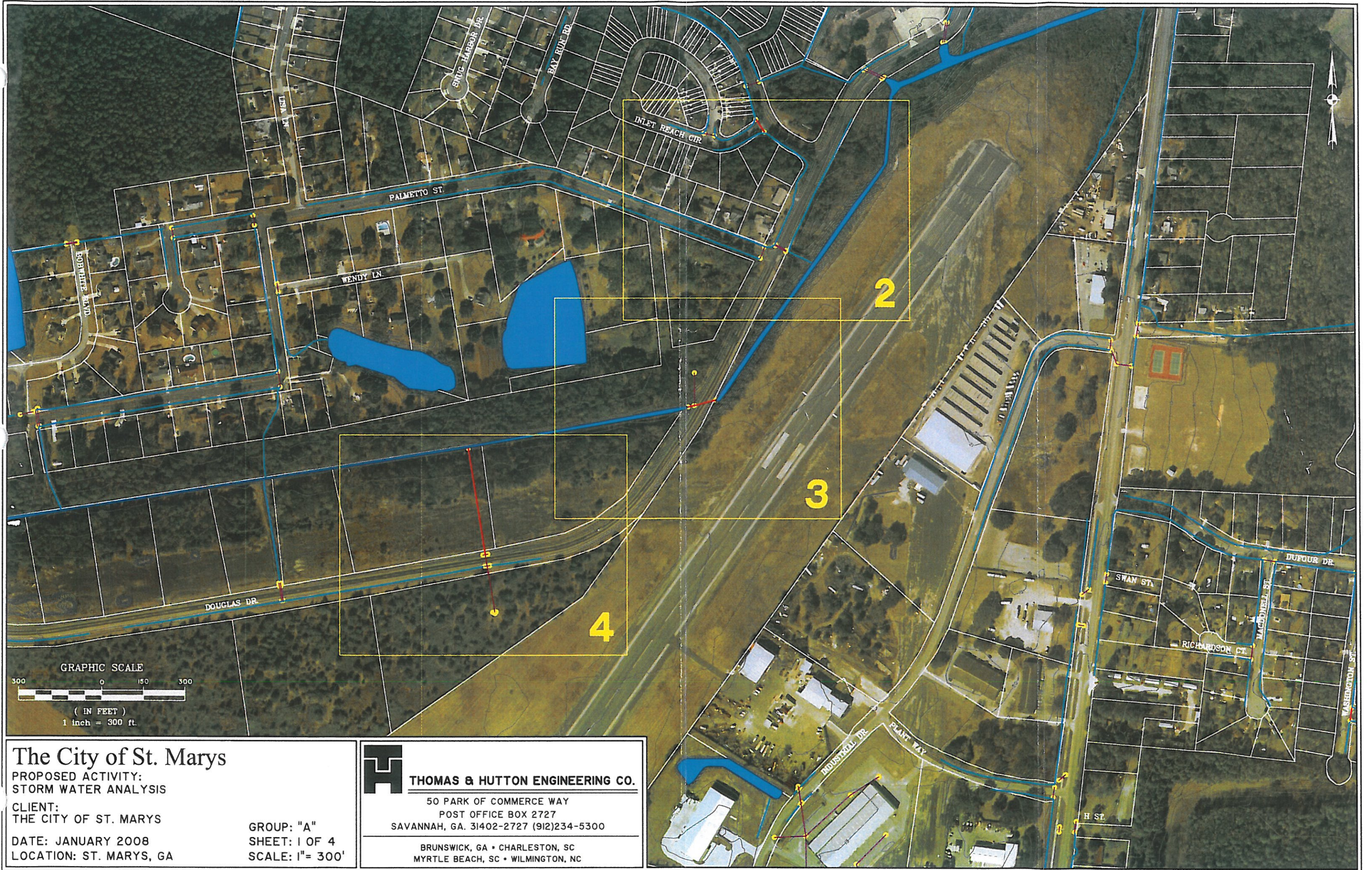
Since the Engineer has no control over the cost of labor, material, or equipment, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, his Opinions of Probable Construction Costs provided herein are to be made on the basis of his experience and qualifications. These opinions represent his best judgment as a design professional familiar with the construction industry.

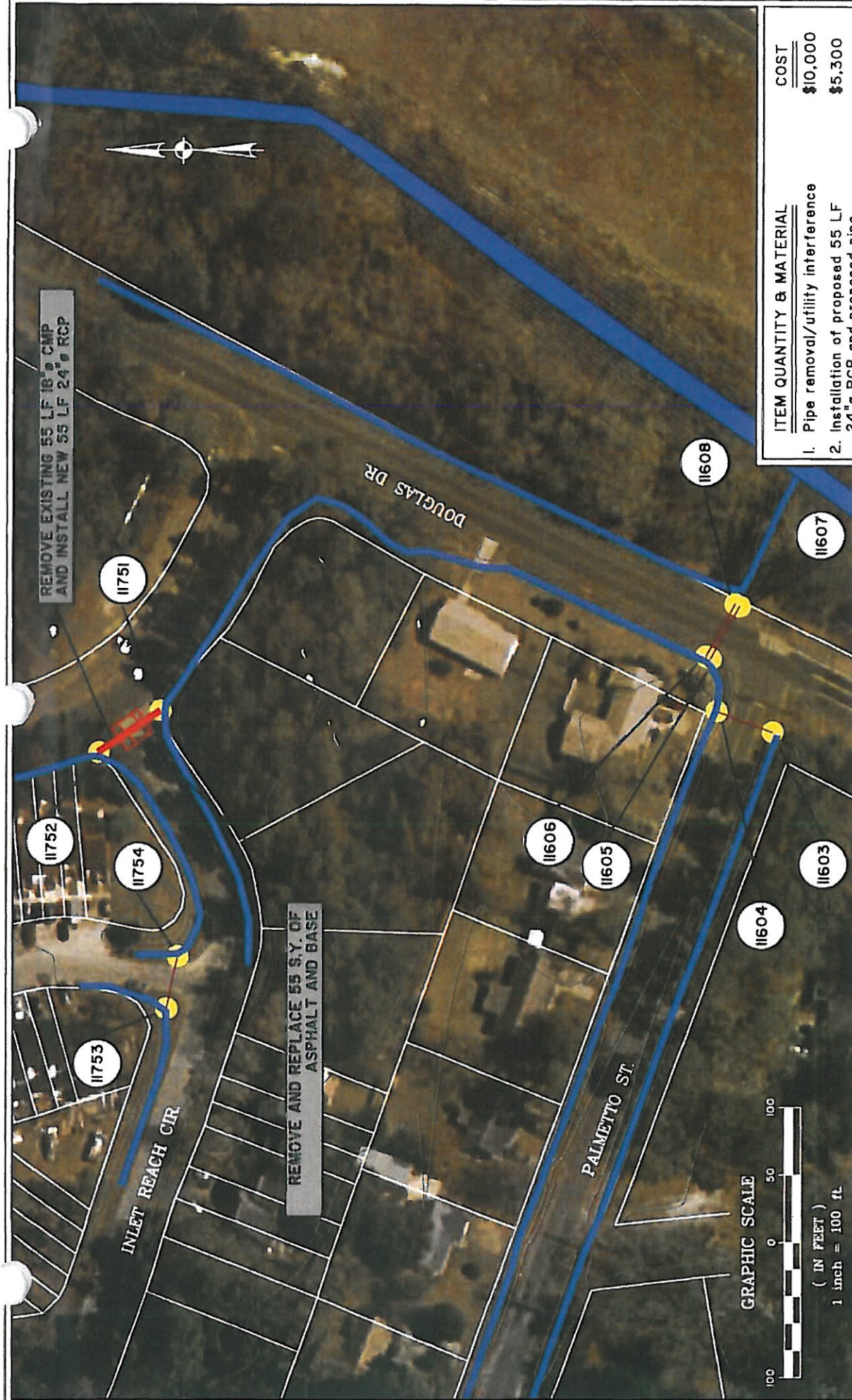


The City of St. Marys
PROPOSED ACTIVITY:
STORM WATER ANALYSIS
CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

SHEET: I
SCALE: 1" = 4000'

THOMAS & HUTTON ENGINEERING CO.
50 PARK OF COMMERCE WAY
POST OFFICE BOX 2727
SAVANNAH, GA. 31402-2727 (912)234-5300
BRUNSWICK, GA • CHARLESTON, SC
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REMOVE EXISTING 55 LF 18\"/>

REMOVE AND REPLACE 55 S.Y. OF ASPHALT AND BASE



<u>ITEM QUANTITY & MATERIAL</u>		<u>COST</u>
1.	Pipe removal/utility interference	\$10,000
2.	Installation of proposed 55 LF 24" RCP and proposed pipe end treatments	\$5,300
3.	Remove and replace 55 S.Y. of asphalt and base	\$2,200
Sub-total		\$17,500
30% Contingency		\$5,250
Total		\$22,750

* Prices does NOT include any
utility relocation or interferences

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CLIENT:
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DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "A"

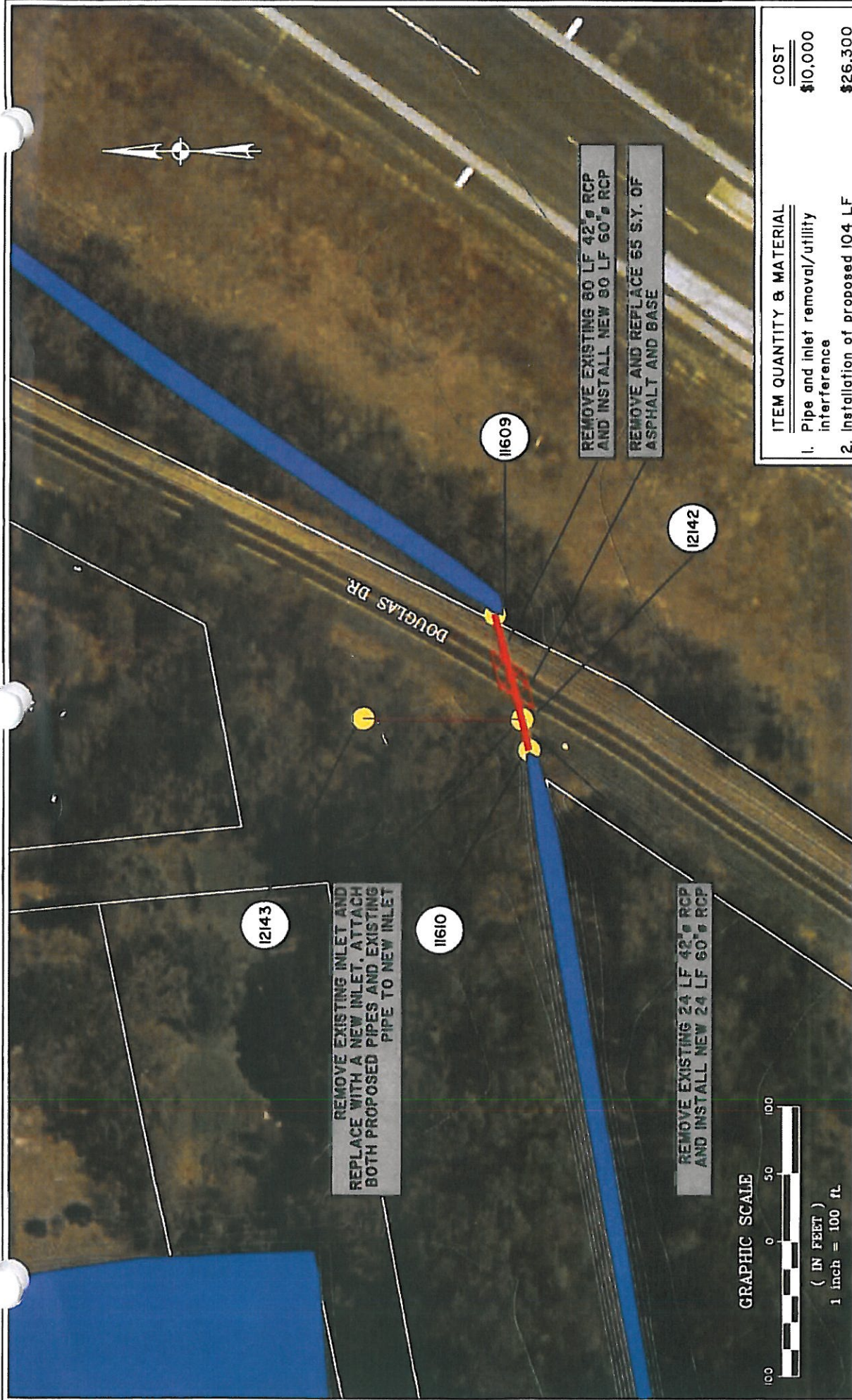
SHEET: 2 OF 4

SCALE: 1"=100'

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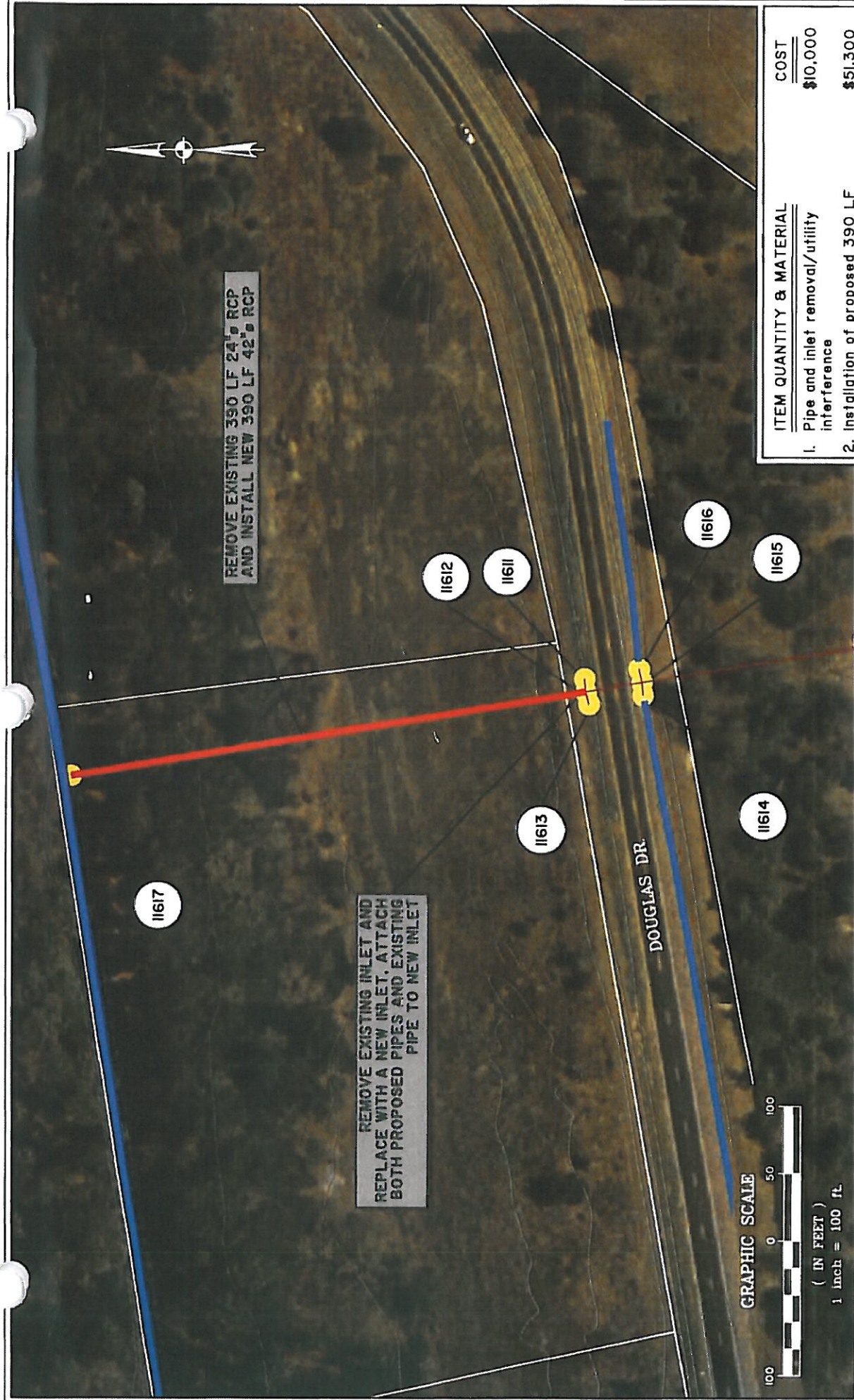
ITEM QUANTITY & MATERIAL		COST
1. Pipe and inlet removal/utility interference		\$10,000
2. Installation of proposed 104 LF 60" RCP, proposed inlet structure and proposed pipe end treatments		\$26,300
3. Remove and replace 65 S.Y. of asphalt and base		\$2,600
4. Attaching existing pipe to proposed inlet structure		\$3,500
Sub-total		\$42,400
30% Contingency		\$12,720
Total		\$55,120

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CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

GROUP: "A"
SHEET: 3 OF 4
SCALE: 1"=100'



ITEM QUANTITY & MATERIAL		COST
1. Pipe and inlet removal/utility interference		\$10,000
2. Installation of proposed 390 LF 42" RCP, proposed inlet structure and proposed pipe end treatments		\$51,300
3. Attaching existing pipes to proposed inlet structure		\$3,500
Sub-total		\$64,800
30% Contingency		\$19,440
Total		\$84,240

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CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

GROUP: "A"
SHEET: 4 OF 4
SCALE: 1"=100'



The City of St. Marys

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CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008
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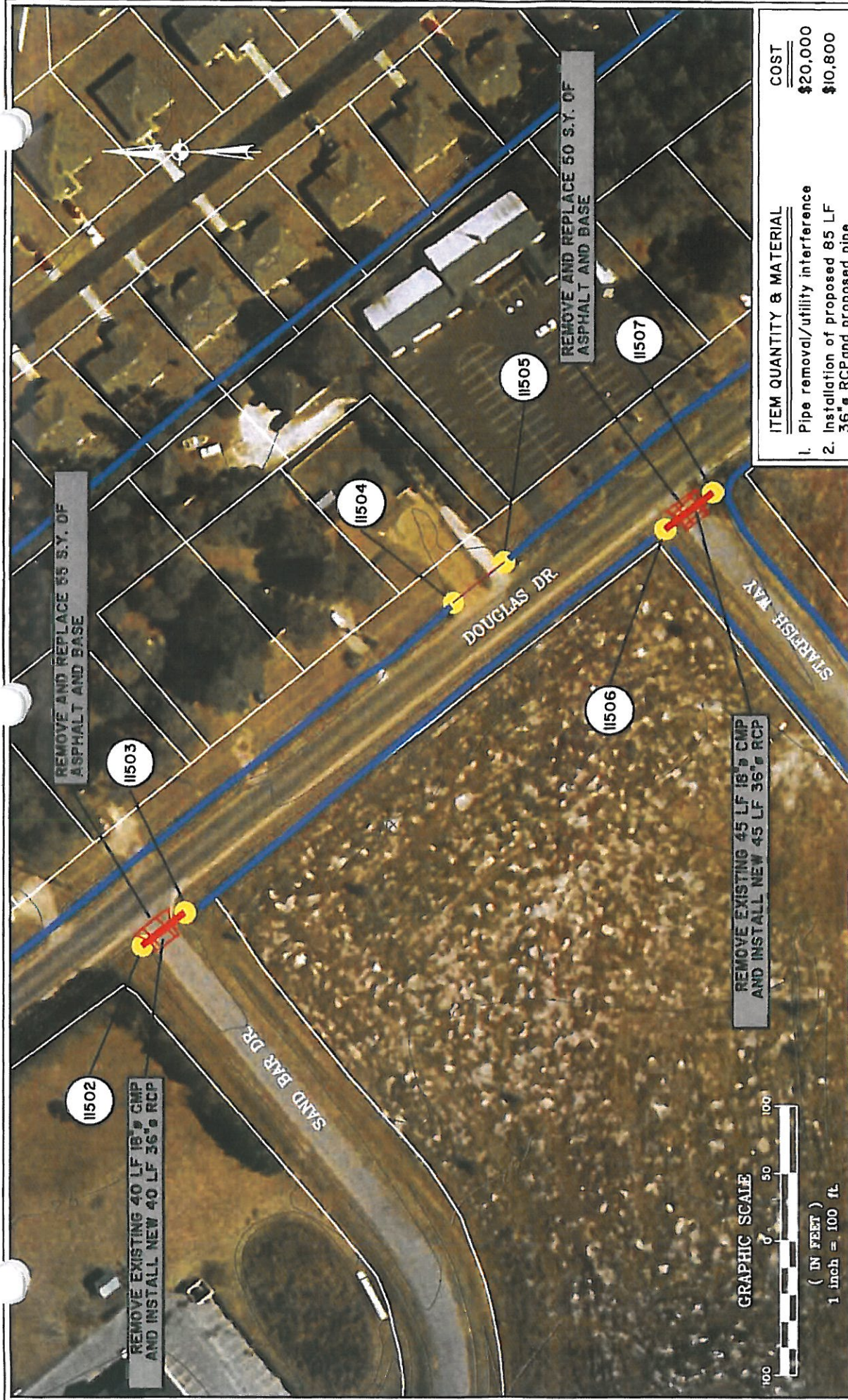
GROUP: "B"
SHEET: 1 OF 5
SCALE: 1"= 300'



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ITEM	QUANTITY & MATERIAL	COST
1.	Pipe removal/utility interference	\$20,000
2.	Installation of proposed 85 LF 36" RCP and proposed pipe end treatments	\$10,800
3.	Remove and replace 105 S.Y. of asphalt and base	\$4,200
Sub-total		\$35,000
30% Contingency		\$10,500
Total		\$45,500

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STORM WATER ANALYSIS

CLIENT:

THE CITY OF ST. MARYS

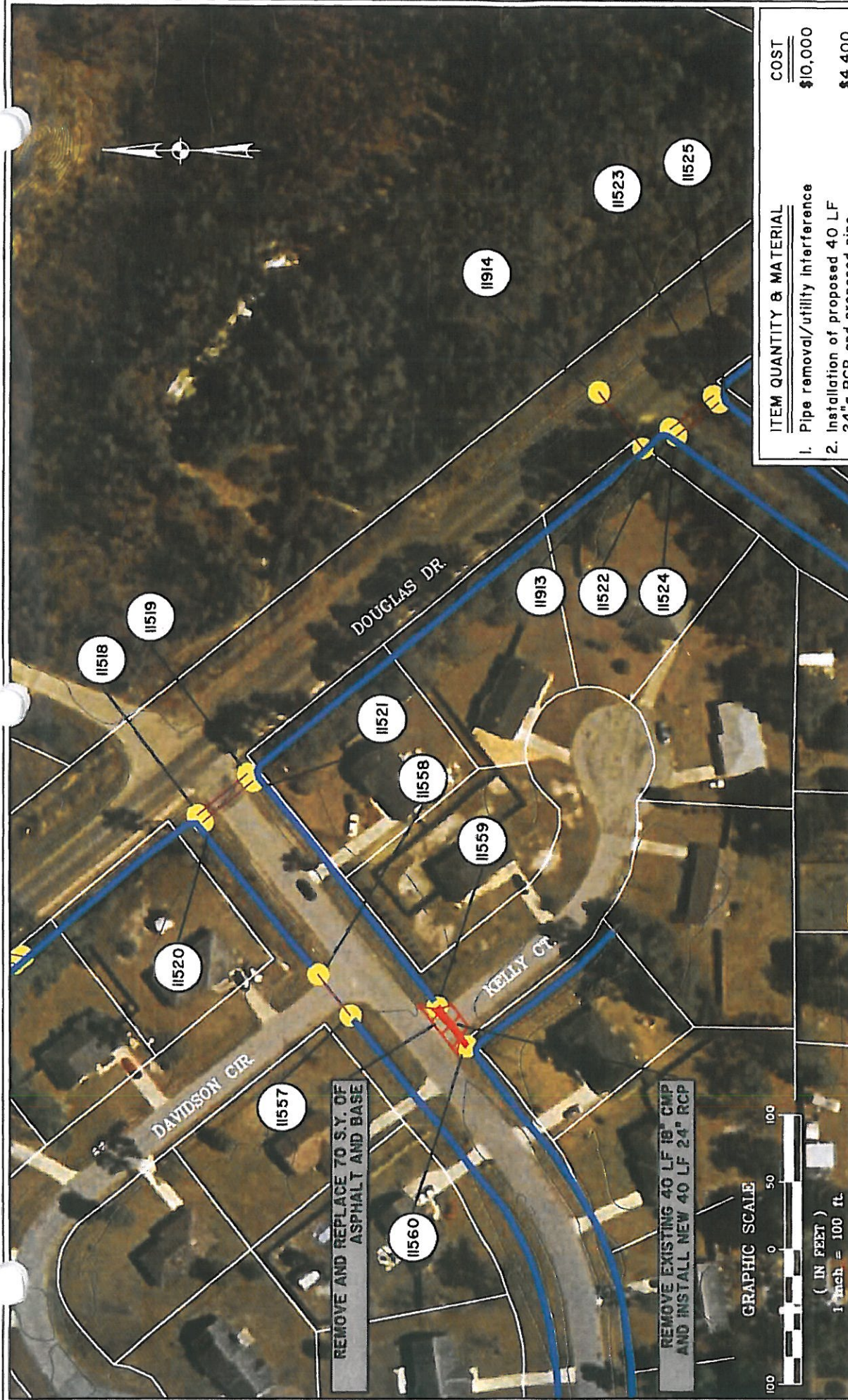
DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "B"

SHEET: 2 OF 5

SCALE: 1"=100'



REMOVE AND REPLACE 70 S.Y. OF ASPHALT AND BASE

REMOVE EXISTING 40 LF 18" CMP AND INSTALL NEW 40 LF 24" RCP

GRAPHIC SCALE

(IN FEET)
1 inch = 100 ft

ITEM QUANTITY & MATERIAL

1. Pipe removal/utility interference
2. Installation of proposed 40 LF 24" RCP and proposed pipe and treatments
3. Remove and replace 70 S.Y. of asphalt and base

COST
\$10,000
\$4,400
\$2,800

Sub-total \$17,200
30% Contingency \$5,160
Total \$22,360

* Prices does NOT include any utility relocation or interferences



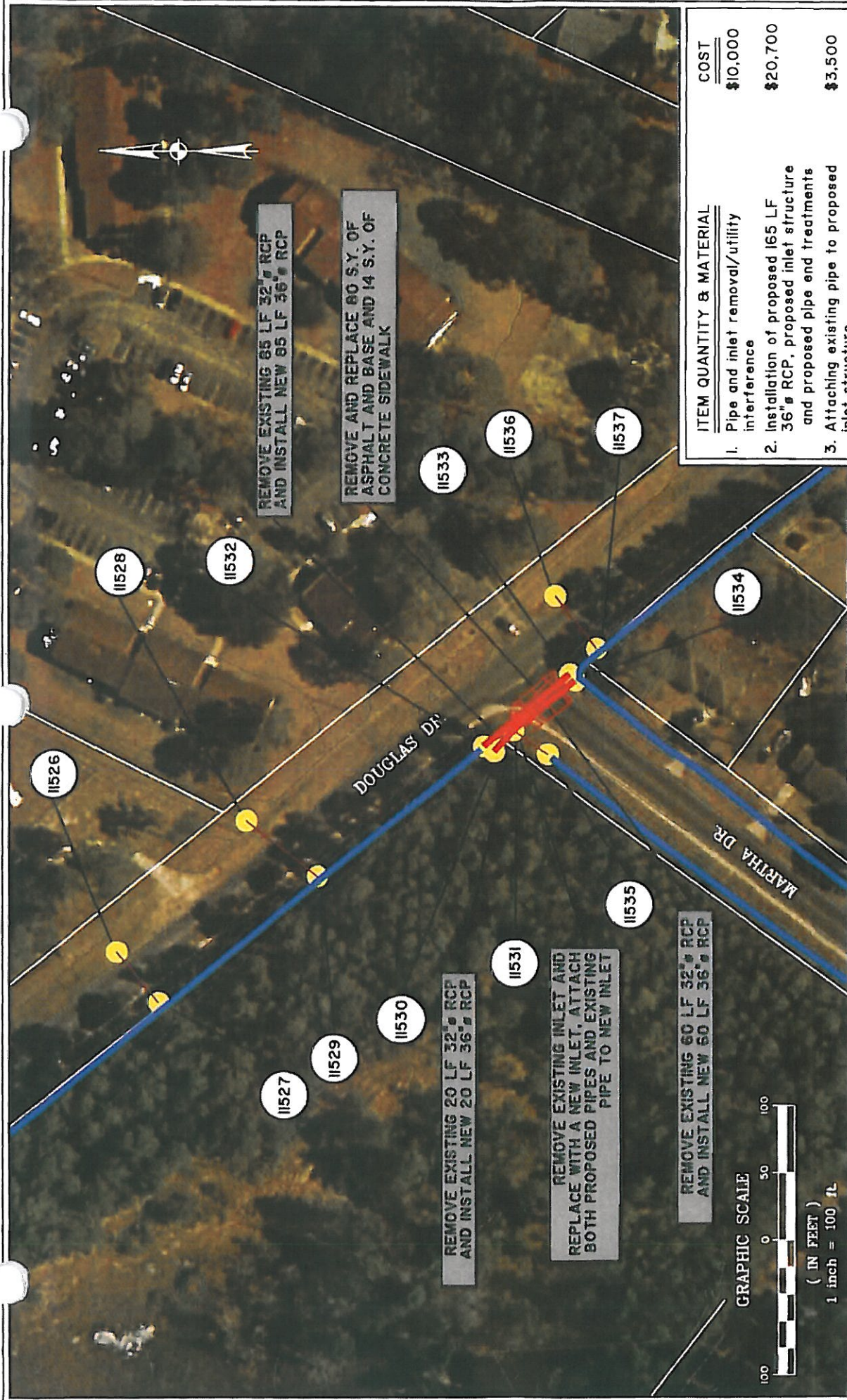
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CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA
GROUP: "B"
SHEET: 3 OF 5
SCALE: 1"=100'



ITEM QUANTITY & MATERIAL		COST
1. Pipe and inlet removal/utility interference		\$10,000
2. Installation of proposed 165 LF 36" RCP, proposed inlet structure and proposed pipe and treatments		\$20,700
3. Attaching existing pipe to proposed inlet structure		\$3,500
4. Remove and replace 80 S.Y. of asphalt and base		\$3,200
5. Remove and replace 14 S.Y. of concrete sidewalk		\$400
Sub-total		\$37,800
30% Contingency		\$11,340
Total		\$49,140

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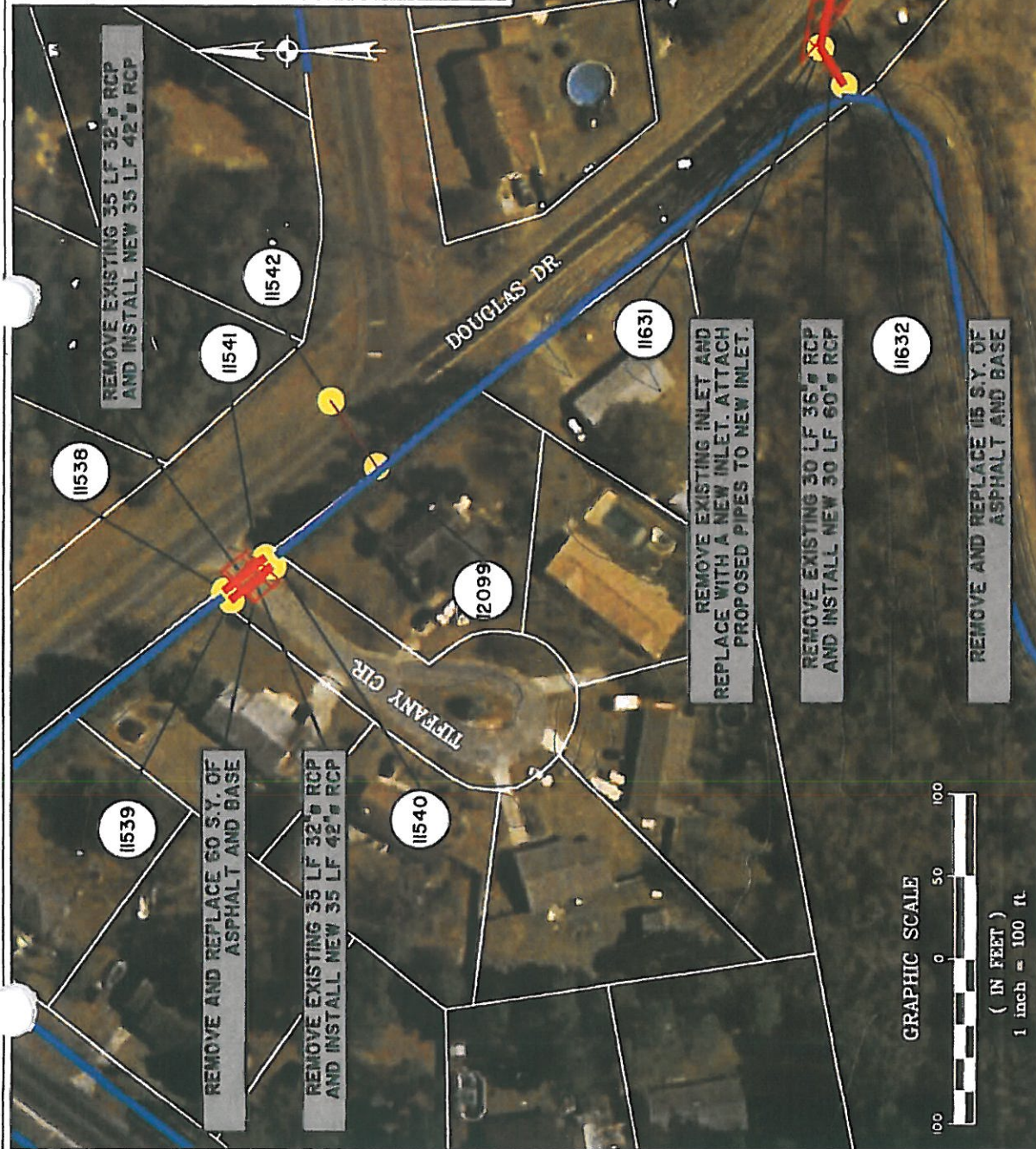
GROUP: "B"

SHEET: 4 OF 5

SCALE: 1"=100'

ITEM QUANTITY & MATERIAL		COST
1. Pipe and inlet removal/utility interference		\$20,000
2. Installation of proposed 70 LF 42" RCP and proposed pipe and treatments		\$12,400
3. Remove and replace 175 S.Y. of asphalt and base		\$7,000
4. Installation of proposed 190 LF 60" RCP, proposed inlet structure and proposed pipe and treatments		\$43,500
Sub-total		\$82,900
30% Contingency		\$24,870
Total		\$107,770

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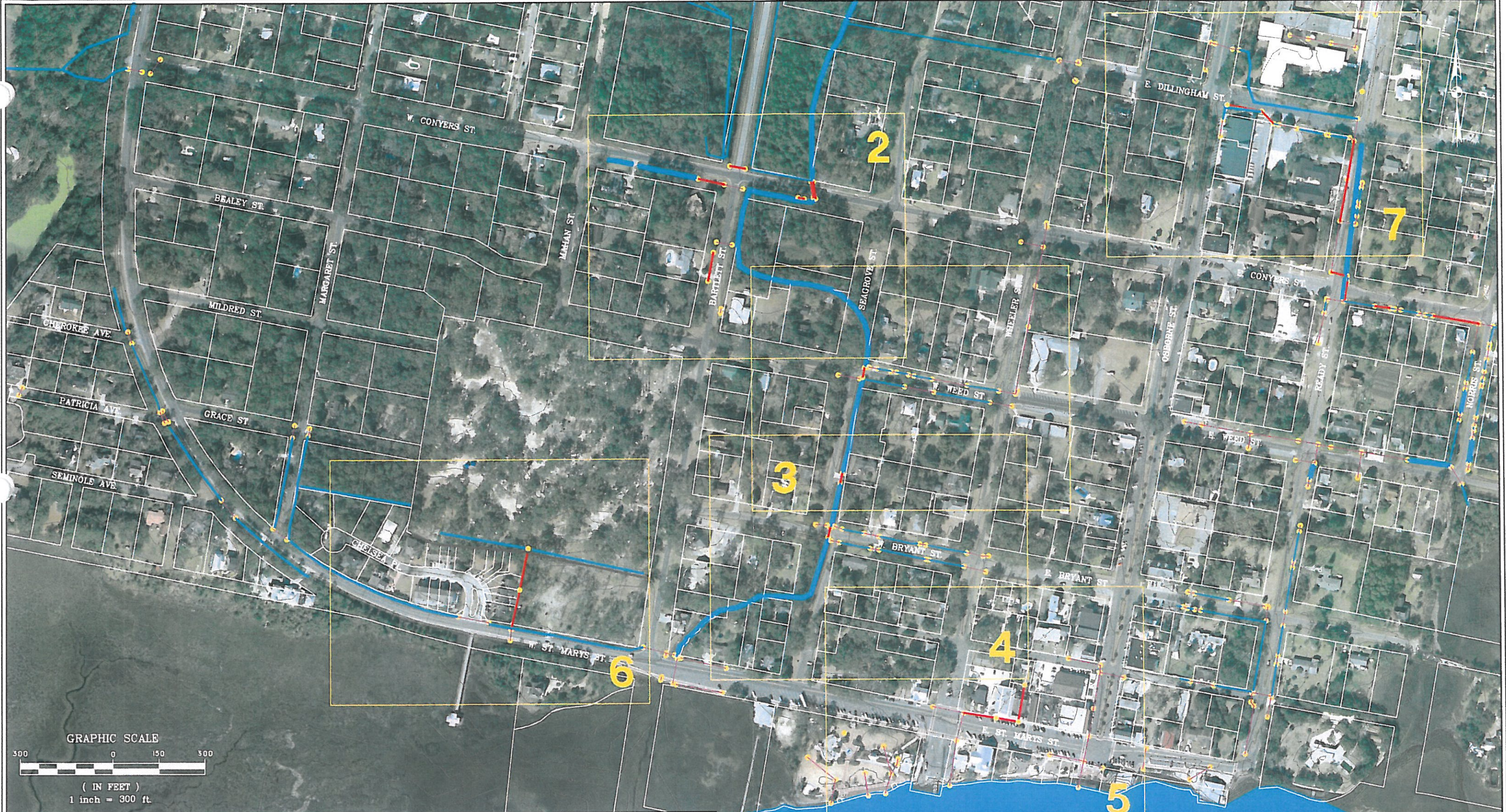
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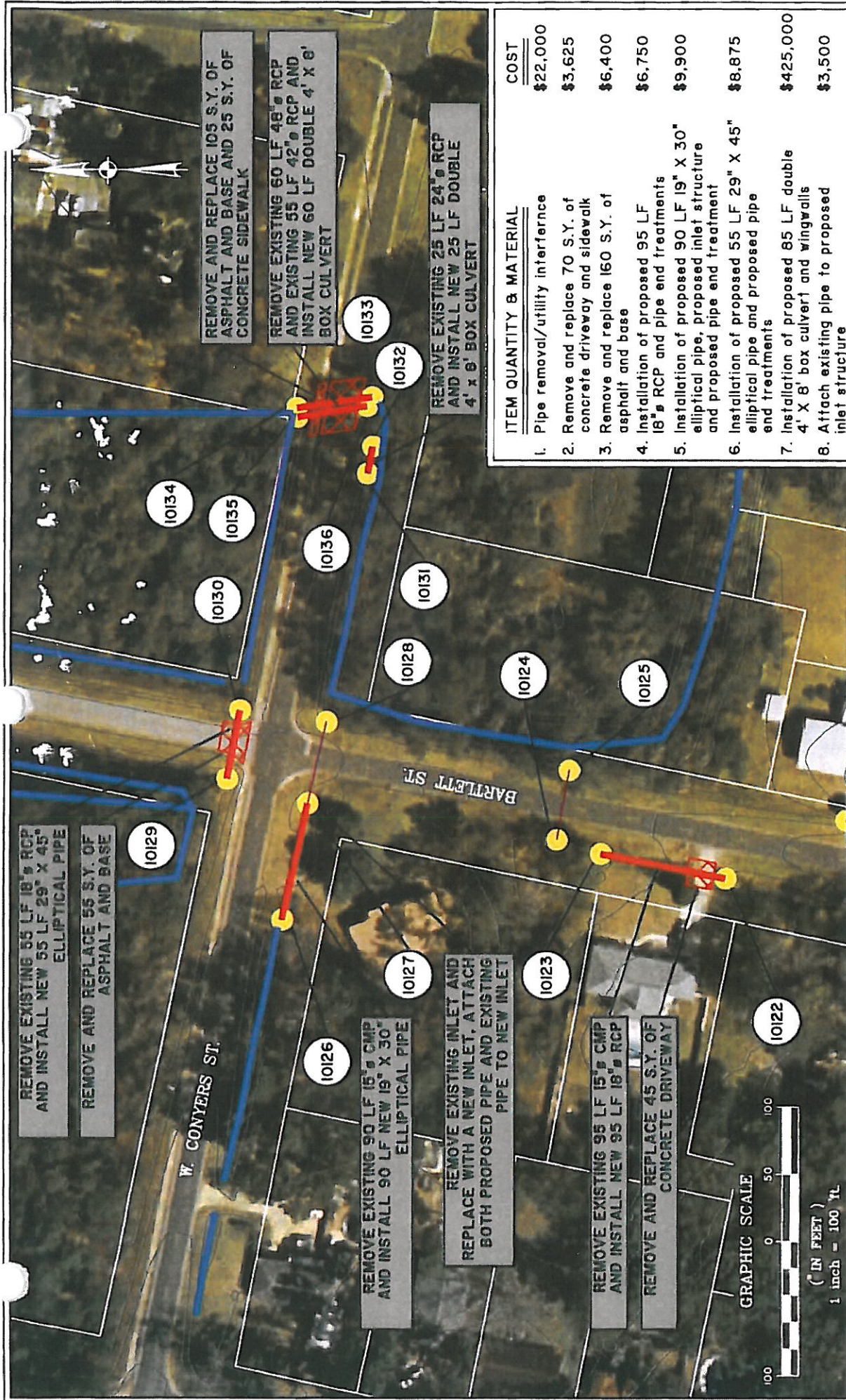
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ITEM QUANTITY & MATERIAL

ITEM	QUANTITY	MATERIAL	COST
1.	Pipe removal/utility interference		\$22,000
2.	Remove and replace 70 S.Y. of concrete driveway and sidewalk		\$3,625
3.	Remove and replace 160 S.Y. of asphalt and base		\$6,400
4.	Installation of proposed 95 LF 18" RCP and pipe end treatments		\$6,750
5.	Installation of proposed 90 LF 19" X 30" elliptical pipe, proposed inlet structure and proposed pipe end treatment		\$9,900
6.	Installation of proposed 55 LF 29" X 45" elliptical pipe and proposed pipe end treatments		\$8,875
7.	Installation of proposed 85 LF double 4' X 8' box culvert and wingwalls		\$425,000
8.	Attach existing pipe to proposed inlet structure		\$3,500

Sub-total	\$486,050
30% Contingency	\$145,815
Total	\$631,865

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LOCATION: ST. MARYS, GA

SHEET: 2 OF 7

SCALE: 1"=100'



ITEM QUANTITY & MATERIAL		COST
1. Pipe removal/utility removal		\$10,000
2. Installation of proposed 35 LF double 4' X 8' box culvert and wingwalls		\$175,000
3. Remove and replace 80 S.Y. of asphalt and base		\$3,200
Sub-total		\$188,200
30% Contingency		\$56,460
Total		\$244,660

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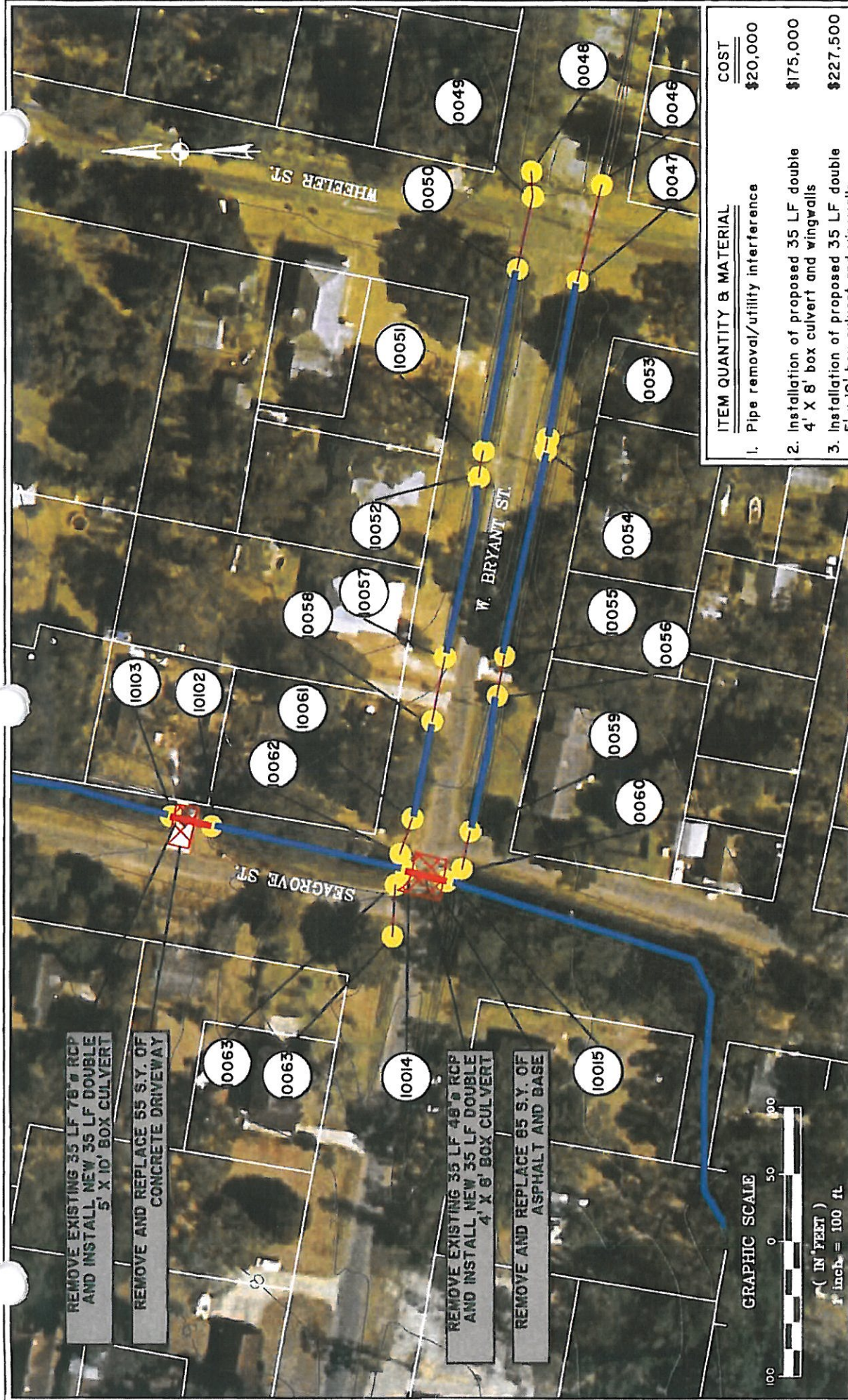


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 DATE: JANUARY 2008
 LOCATION: ST. MARYS, GA
 GROUP: "C"
 SHEET: 3 OF 7
 SCALE: 1"=100'



ITEM QUANTITY & MATERIAL		COST
1. Pipe removal/utility interference		\$20,000
2. Installation of proposed 35 LF double 4' X 8' box culvert and wingwalls		\$175,000
3. Installation of proposed 35 LF double 5' x 10' box culvert and wingwalls		\$227,500
4. Remove and replace 85 S.Y. of asphalt and base		\$3,400
5. Remove and replace 55 S.Y. of concrete driveway		\$4,125
Sub-total		\$430,025
30% Contingency		\$129,008
Total		\$559,033

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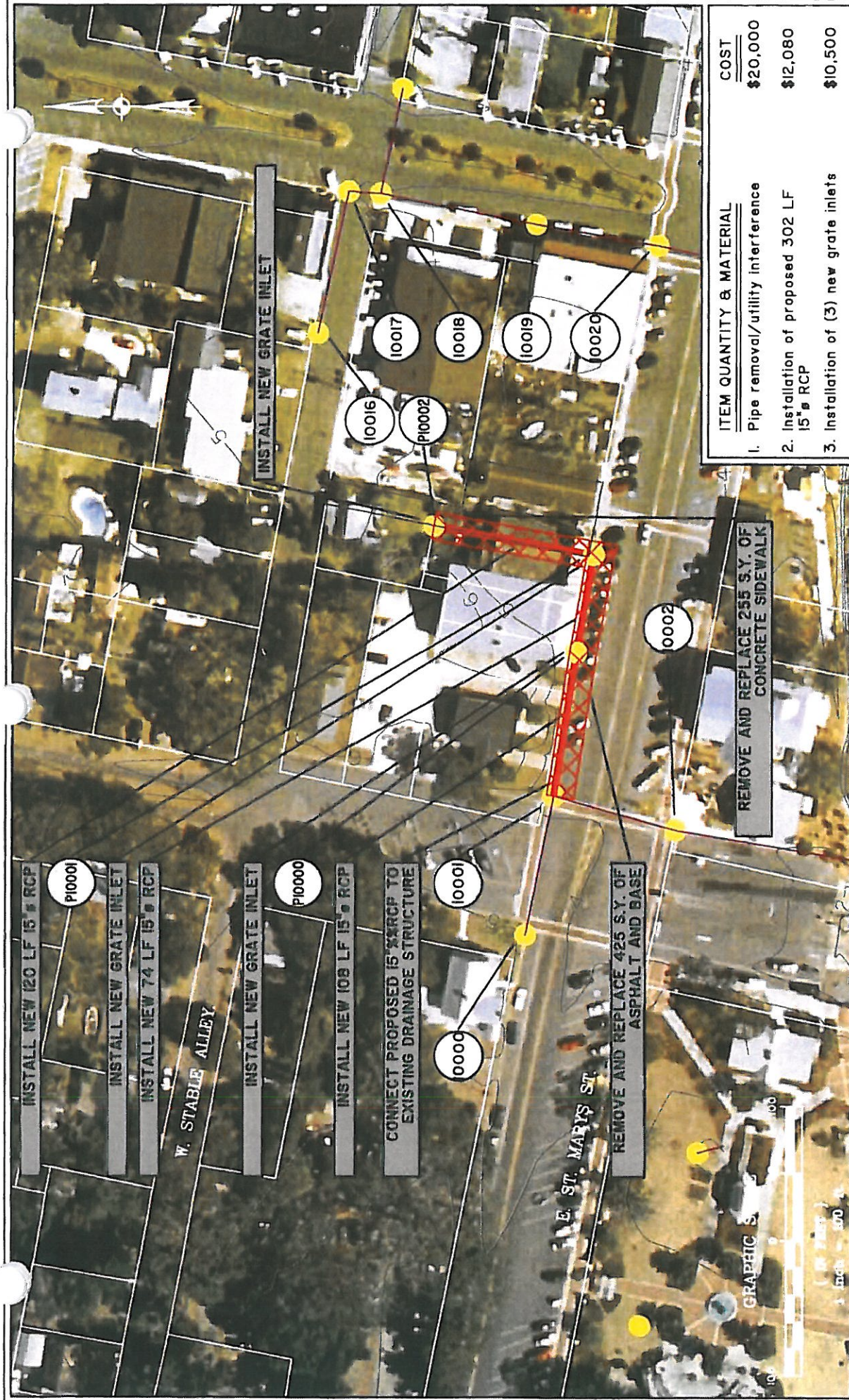
LOCATION: ST. MARYS, GA

GROUP: "C"

SHEET: 4 OF 7

SCALE: 1"=100'





The City of St. Marys

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STORM WATER ANALYSIS

CLIENT:

THE CITY OF ST. MARYS

DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "C"

SHEET: 5 OF 7

SCALE: 1"=100'



THOMAS & HUTTON ENGINEERING CO.

50 PARK OF COMMERCE WAY
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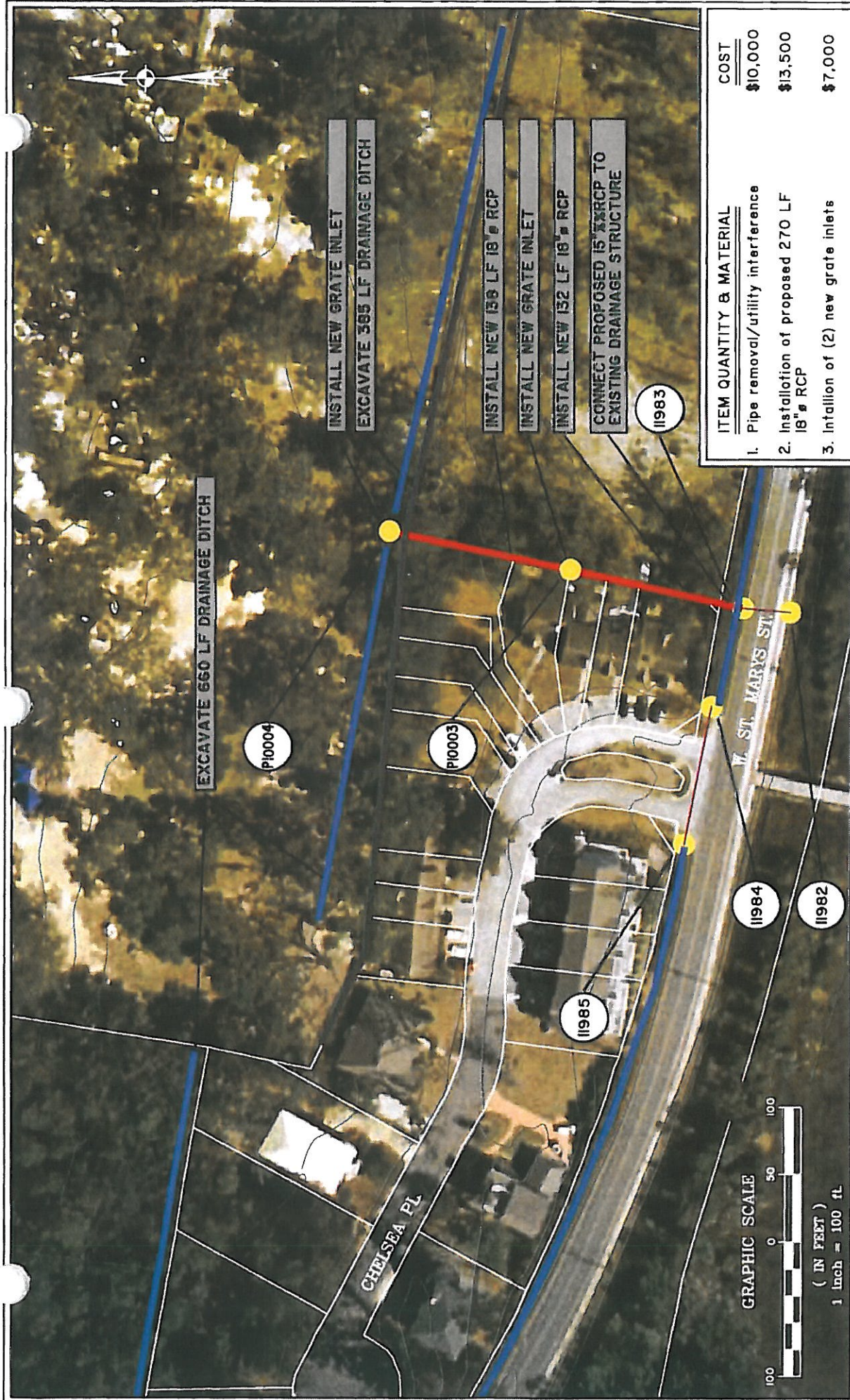
ITEM QUANTITY & MATERIAL

1. Pipe removal/utility interference
2. Installation of proposed 302 LF 15" RCP
3. Installation of (3) new grate inlets
4. Remove and replace 425 S.Y. of asphalt and base
5. Remove and replace 255 S.Y. of concrete sidewalk
6. Attach 15" RCP to existing drainage structure

COST
\$20,000
\$12,080
\$10,500
\$17,000
\$23,120
\$3,500

Sub-total	\$86,200
30% Contingency	\$25,860
Total	\$112,060

* Prices does NOT include any utility relocation or interferences



ITEM	QUANTITY & MATERIAL	COST
1.	Pipe removal/utility interference	\$10,000
2.	Installation of proposed 270 LF 18" RCP	\$13,500
3.	Installation of (2) new grate inlets	\$7,000
4.	Excavation of 1,045 LF drainage ditch	\$104,500
5.	Attach 18" RCP to existing drainage structure	\$3,500
Sub-total		\$138,500
30% Contingency		\$41,550
Total		\$180,050

* Prices does NOT include any utility relocation or interferences



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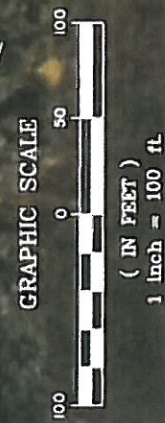
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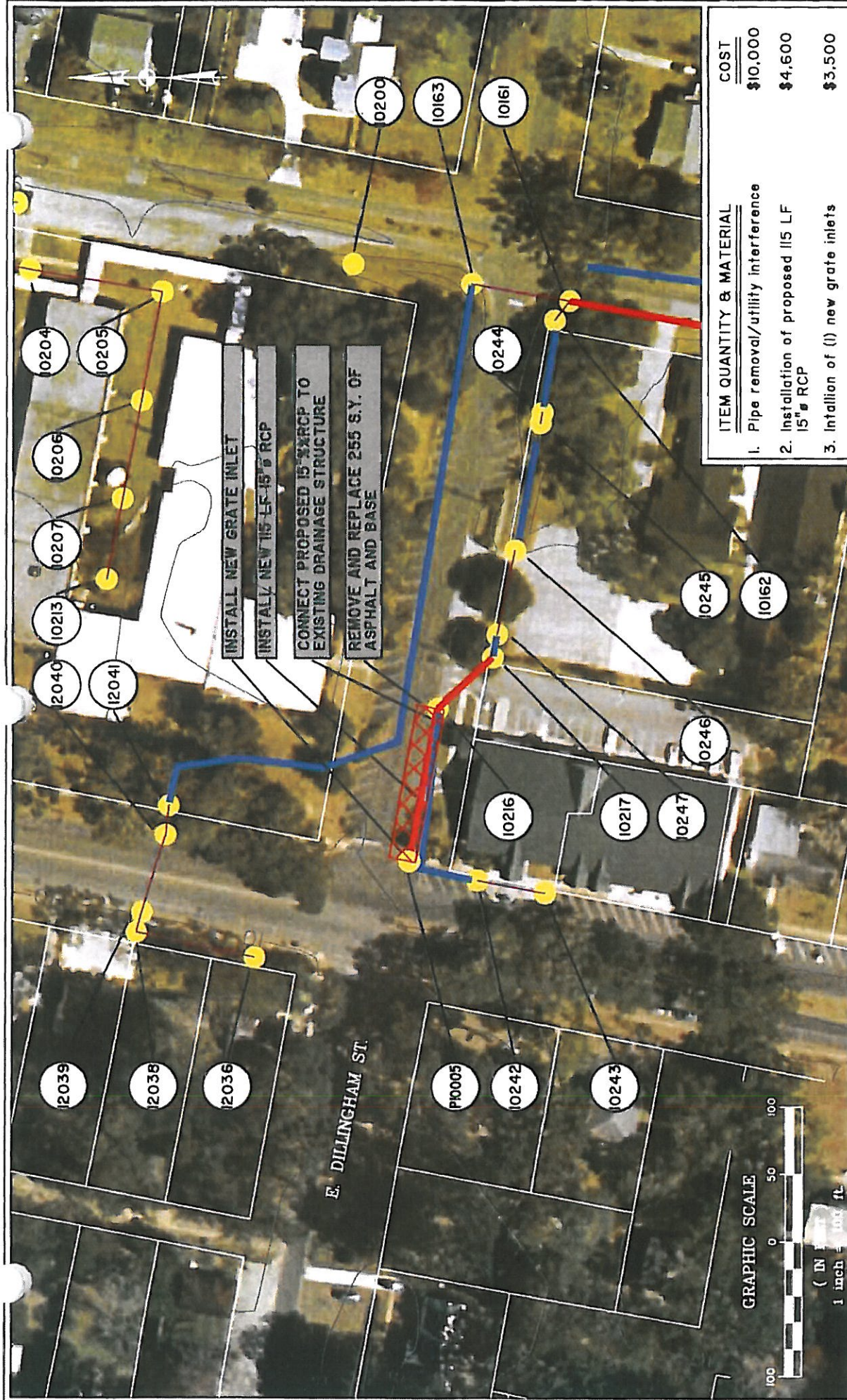
The City of St. Marys
PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

GROUP: "C"
SHEET: 6 OF 7
SCALE: 1"=100'





ITEM QUANTITY & MATERIAL	COST
1. Pipe removal/utility interference	\$10,000
2. Installation of proposed 15 LF 15" RCP	\$4,600
3. Intialion of (1) new grate inlets	\$3,500
4. Attach 15" RCP to existing drainage structure	\$3,500
5. Remove and replace 255 S.Y. of asphalt and base	\$10,200
Sub-total	\$31,800
30% Contingency	\$9,540
Total	\$41,340

* Prices does NOT include any utility relocation or interferences



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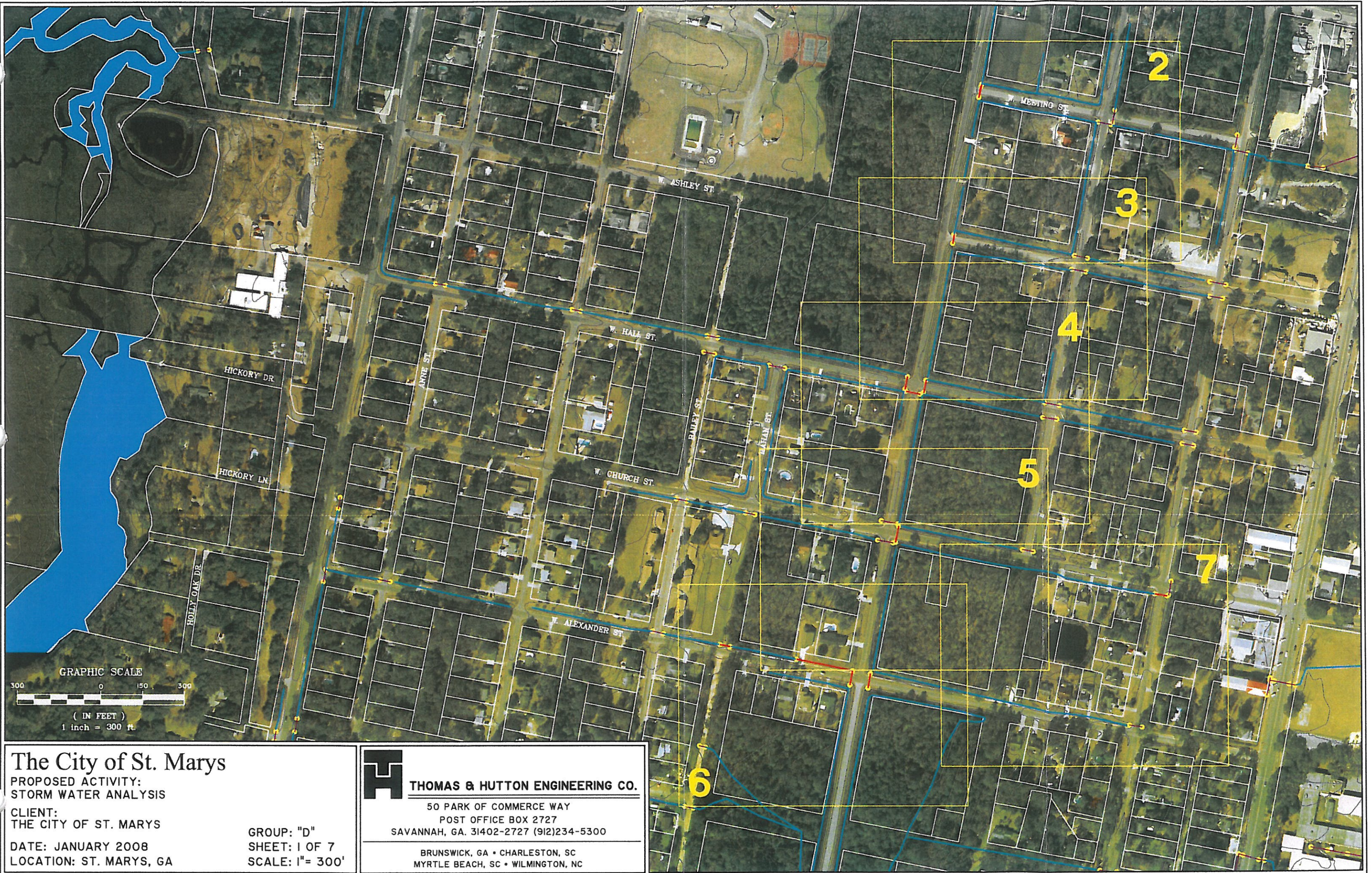
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The City of St. Marys
PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

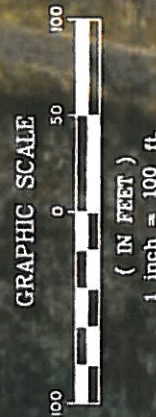
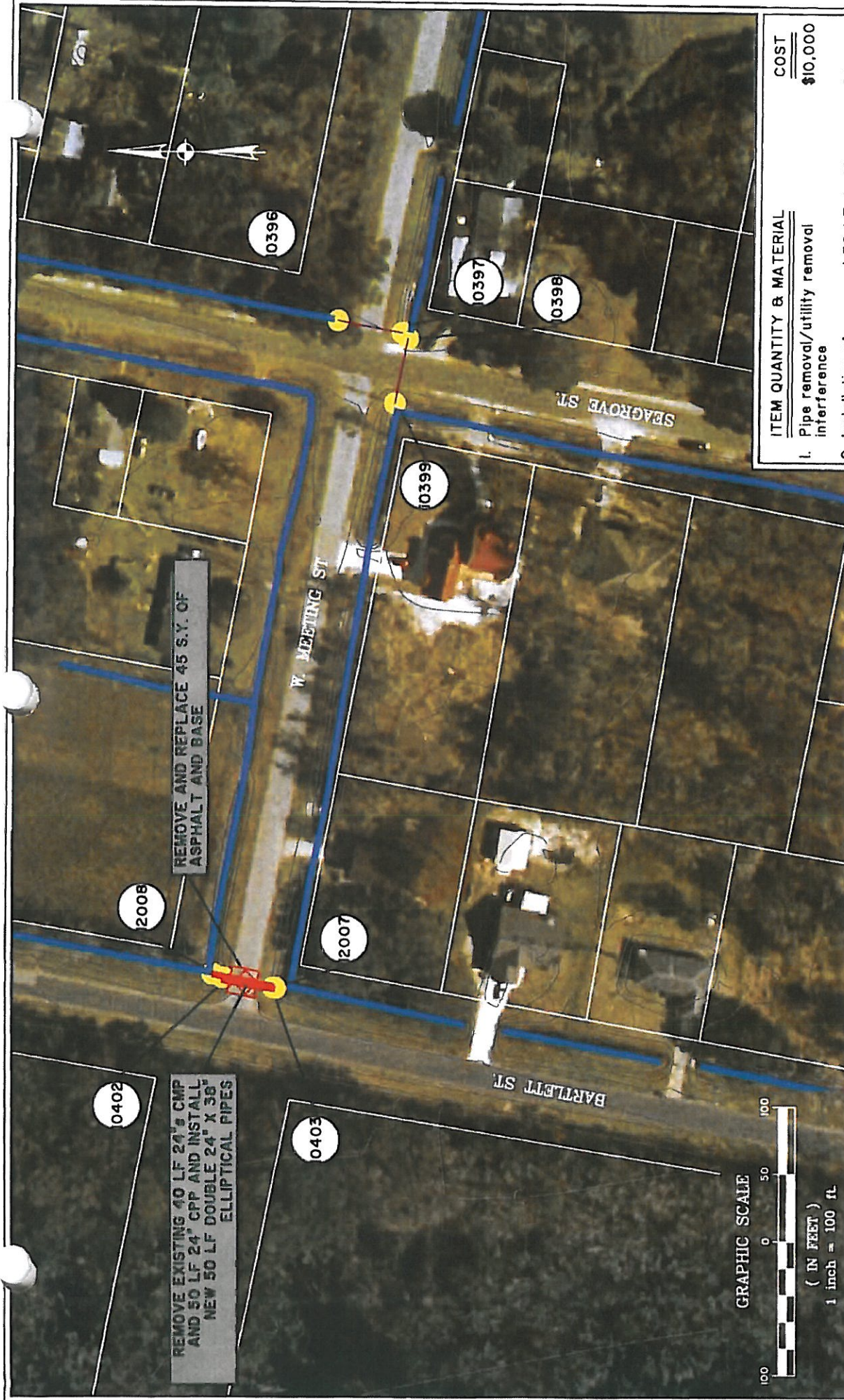
GROUP: "C"
SHEET: 7 OF 7
SCALE: 1"=100'



The City of St. Marys
PROPOSED ACTIVITY:
STORM WATER ANALYSIS
CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

GROUP: "D"
SHEET: 1 OF 7
SCALE: 1"= 300'

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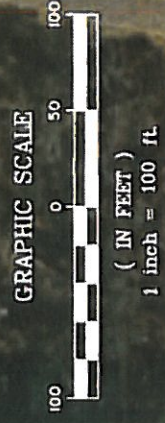


ITEM QUANTITY & MATERIAL		COST
1.	Pipe removal/utility removal interference	\$10,000
2.	Installation of proposed 50 LF double 24" x 38" elliptical pipe and proposed pipe and treatments	\$4,300
3.	Remove and replace 45 S.Y. of asphalt and base	\$1,800
Sub-total		\$16,100
30% Contingency		\$4,830
Total		\$20,930

* Prices does NOT include any utility relocation or interferences

The City of St. Marys
 PROPOSED ACTIVITY:
 STORM WATER ANALYSIS
 CLIENT:
 THE CITY OF ST. MARYS
 DATE: JANUARY 2008
 LOCATION: ST. MARYS, GA
 GROUP: "D"
 SHEET: 2 OF 7
 SCALE: 1"=100'

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ITEM	QUANTITY & MATERIAL	COST
1.	Pipe removal/utility interference	\$10,000
2.	Installation of proposed 35 LF double 38" x 60" elliptical pipe and proposed pipe end treatments.	\$7,000
3.	Remove and replace 50 S.Y. of asphalt and base	\$2,000
Sub-total		\$19,000
30% Contingency		\$5,700
Total		\$24,700

* Prices does NOT include any utility relocation or interferences



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The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

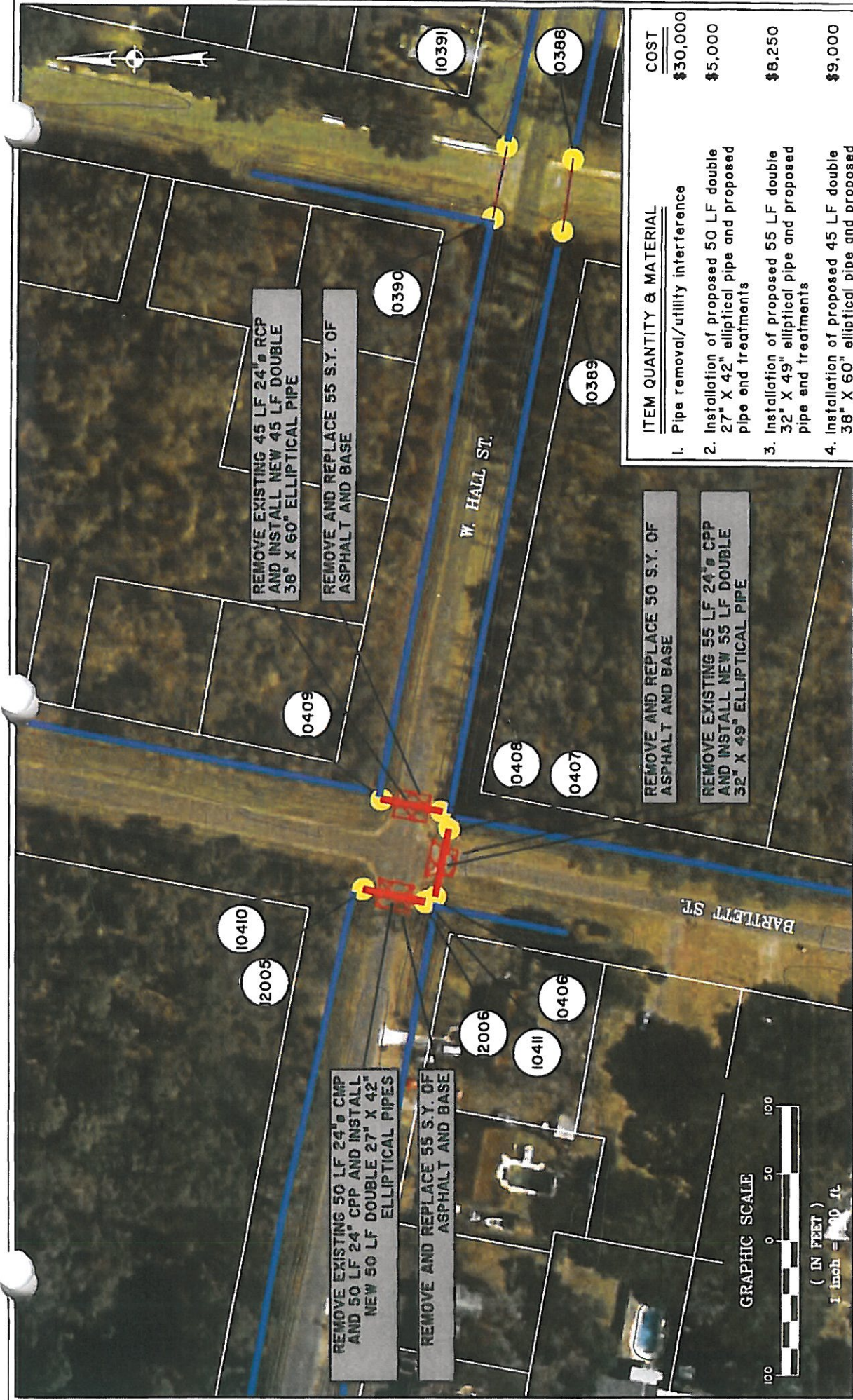
DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "D"

SHEET: 3 OF 7

SCALE: 1"=100'



ITEM QUANTITY & MATERIAL		COST
1. Pipe removal/utility interference		\$30,000
2. Installation of proposed 50 LF double 27" X 42" elliptical pipe and proposed pipe end treatments		\$5,000
3. Installation of proposed 55 LF double 32" X 49" elliptical pipe and proposed pipe end treatments		\$8,250
4. Installation of proposed 45 LF double 38" X 60" elliptical pipe and proposed pipe end treatments		\$9,000
5. Remove and replace 160 S.Y. of asphalt and base		\$6,400
Sub-total		\$58,650
30% Contingency		\$17,595
Total		\$76,245

* Prices does NOT include any utility relocation or interferences

The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "D"

SHEET: 4 OF 7

SCALE: 1"=100'

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ITEM	QUANTITY & MATERIAL	COST
1.	Pipe removal/utility interference	\$10,000
2.	Installation of proposed 60 LF double 43" x 68" elliptical pipe and proposed pipe end treatments	\$8,286
3.	Remove and replace 50 S.Y. of asphalt and base and 15 S.Y. of concrete sidewalk	\$2,150
Sub-total		\$20,436
30% Contingency		\$6,131
Total		\$26,567

* Prices does NOT include any utility relocation or interferences



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PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

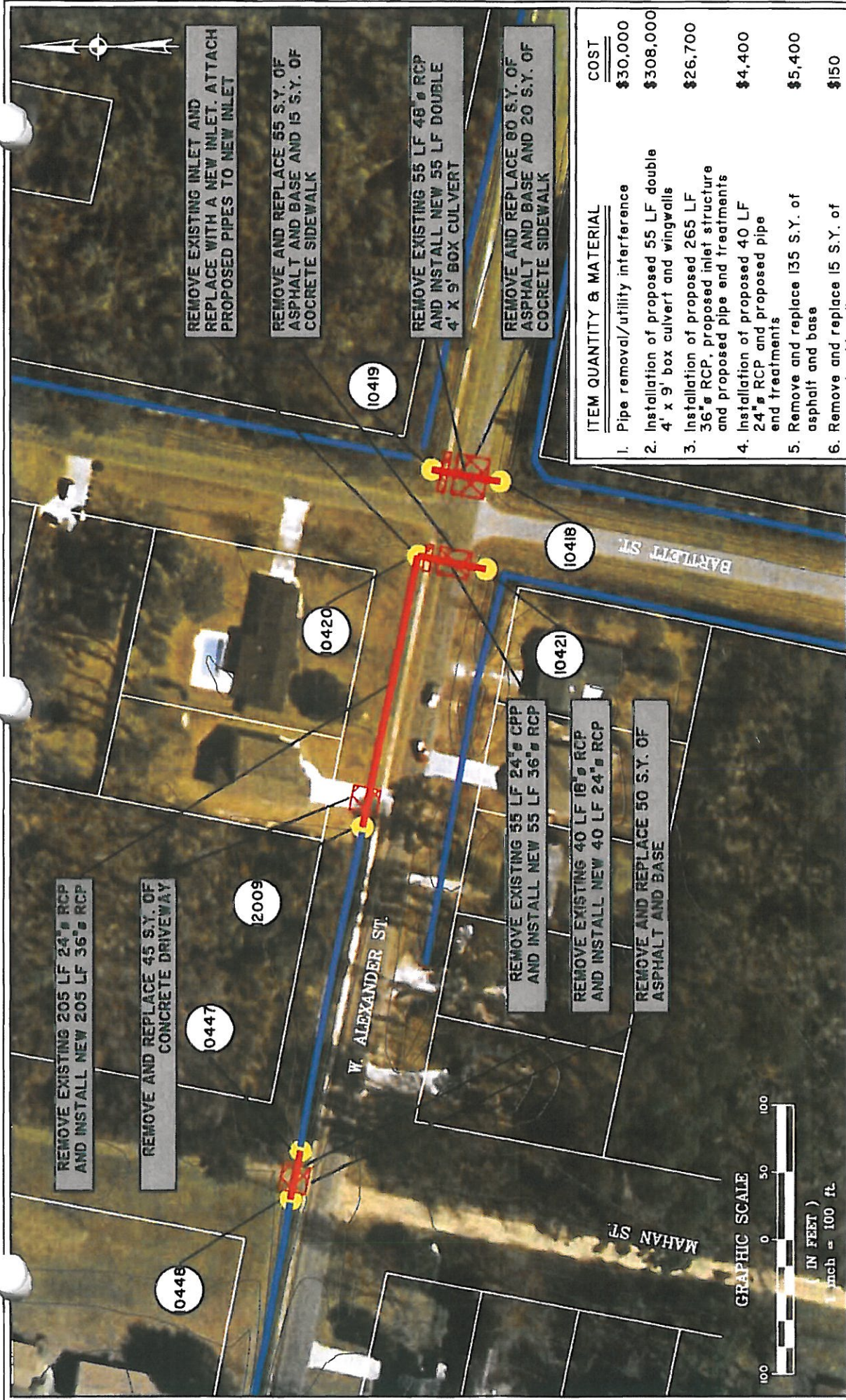
DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "D"

SHEET: 5 OF 7

SCALE: 1"=100'



The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

GROUP: "D"
SHEET: 6 OF 7
SCALE: 1"=100'



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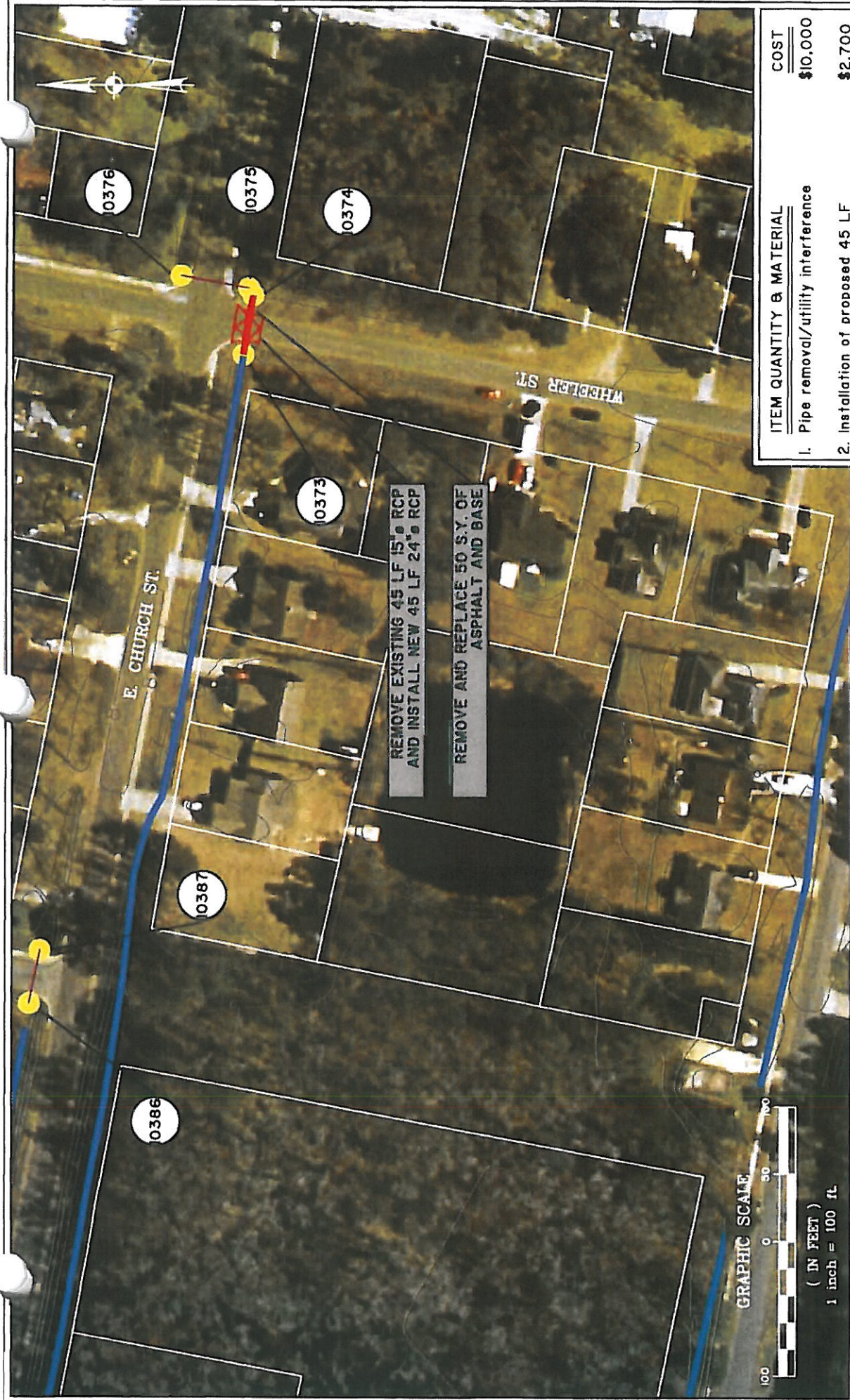
ITEM QUANTITY & MATERIAL

1. Pipe removal/utility interference
2. Installation of proposed 55 LF double 4' x 9' box culvert and wingwalls
3. Installation of proposed 265 LF 36" RCP, proposed inlet structure and proposed pipe and treatments
4. Installation of proposed 40 LF 24" RCP and proposed pipe end treatments
5. Remove and replace 135 S.Y. of asphalt and base
6. Remove and replace 15 S.Y. of concrete sidewalk

COST	
\$30,000	
\$308,000	
\$26,700	
\$4,400	
\$5,400	
\$150	

Sub-total	\$374,650
30% Contingency	\$112,395
Total	\$487,045

* Prices does NOT include any utility relocation or interferences



REMOVE EXISTING 45 LF 15" RCP
AND INSTALL NEW 45 LF 24" RCP

REMOVE AND REPLACE 50 S.Y. OF
ASPHALT AND BASE



ITEM QUANTITY & MATERIAL		COST
1. Pipe removal/utility interference		\$10,000
2. Installation of proposed 45 LF 24" RCP and proposed pipe end treatments		\$2,700
3. Remove and replace 50 S.Y. of asphalt and base		\$2,000
Sub-total		\$14,700
30% Contingency		\$4,410
Total		\$19,110

* Prices does NOT include any utility relocation or interferences

The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "D"

SHEET: 7 OF 7

SCALE: 1"=100'

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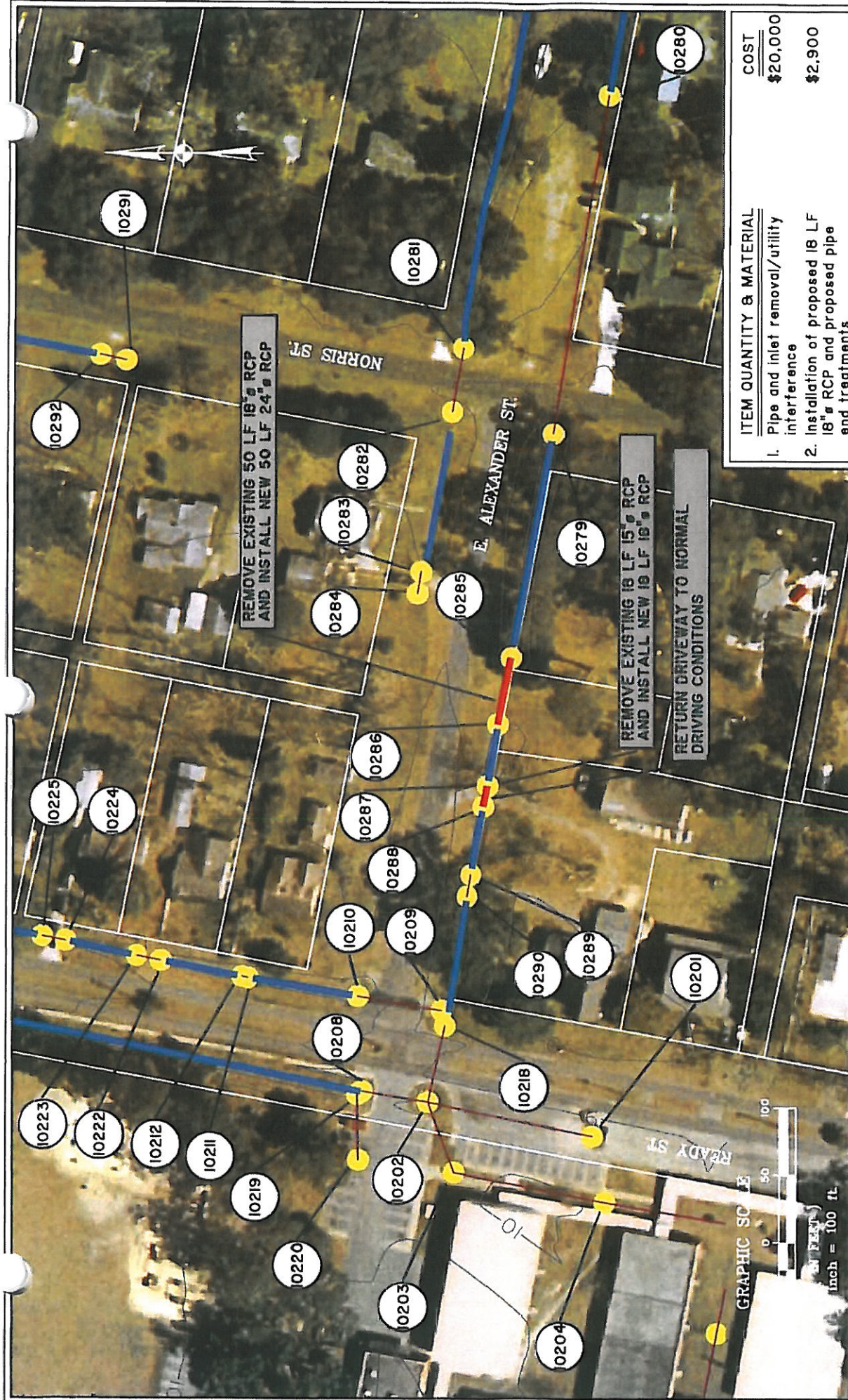
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The City of St. Marys
PROPOSED ACTIVITY:
STORM WATER ANALYSIS
CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

GROUP: "E"
SHEET: 1 OF 5
SCALE: 1" = 300'

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ITEM QUANTITY & MATERIAL

1. Pipe and inlet removal/utility interference
2. Installation of proposed 18 LF 18" RCP and proposed pipe and treatments
3. Installation of proposed 50 LF 24" RCP and proposed pipe and treatments
4. Return driveway to normal driving conditions

COST
\$20,000

\$2,900

\$5,000

\$300

Sub-total \$28,200

30% Contingency \$8,460

Total \$36,660

* Prices does NOT include any utility relocation or interferences



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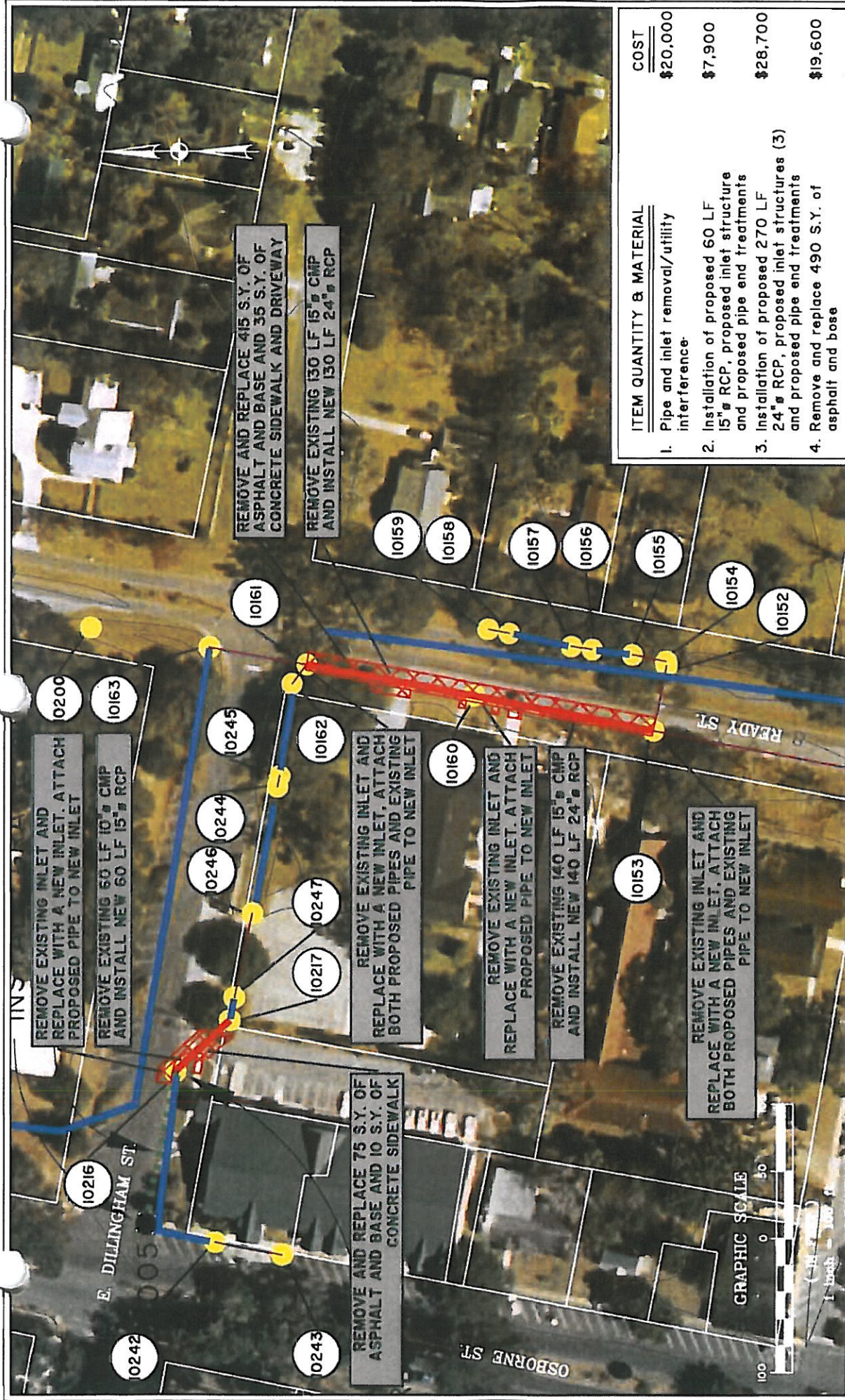
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The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

GROUP "E"
SHEET: 2 OF 5
SCALE: 1"=100'



ITEM QUANTITY & MATERIAL

1. Pipe and inlet removal/utility interference.
2. Installation of proposed 60 LF 15" RCP, proposed inlet structure and proposed pipe end treatments
3. Installation of proposed 270 LF 24" RCP, proposed inlet structures (3) and proposed pipe end treatments
4. Remove and replace 490 S.Y. of asphalt and base
5. Remove and replace 45 S.Y. of concrete sidewalk and driveway
6. Attaching existing pipes to proposed inlet structures

COST
\$20,000
\$7,900
\$28,700
\$19,600
\$3,375
\$3,500

Sub-total	\$83,075
30% Contingency	\$24,922.50
Total	\$107,997.50

* Prices does NOT include any utility relocation or interferences

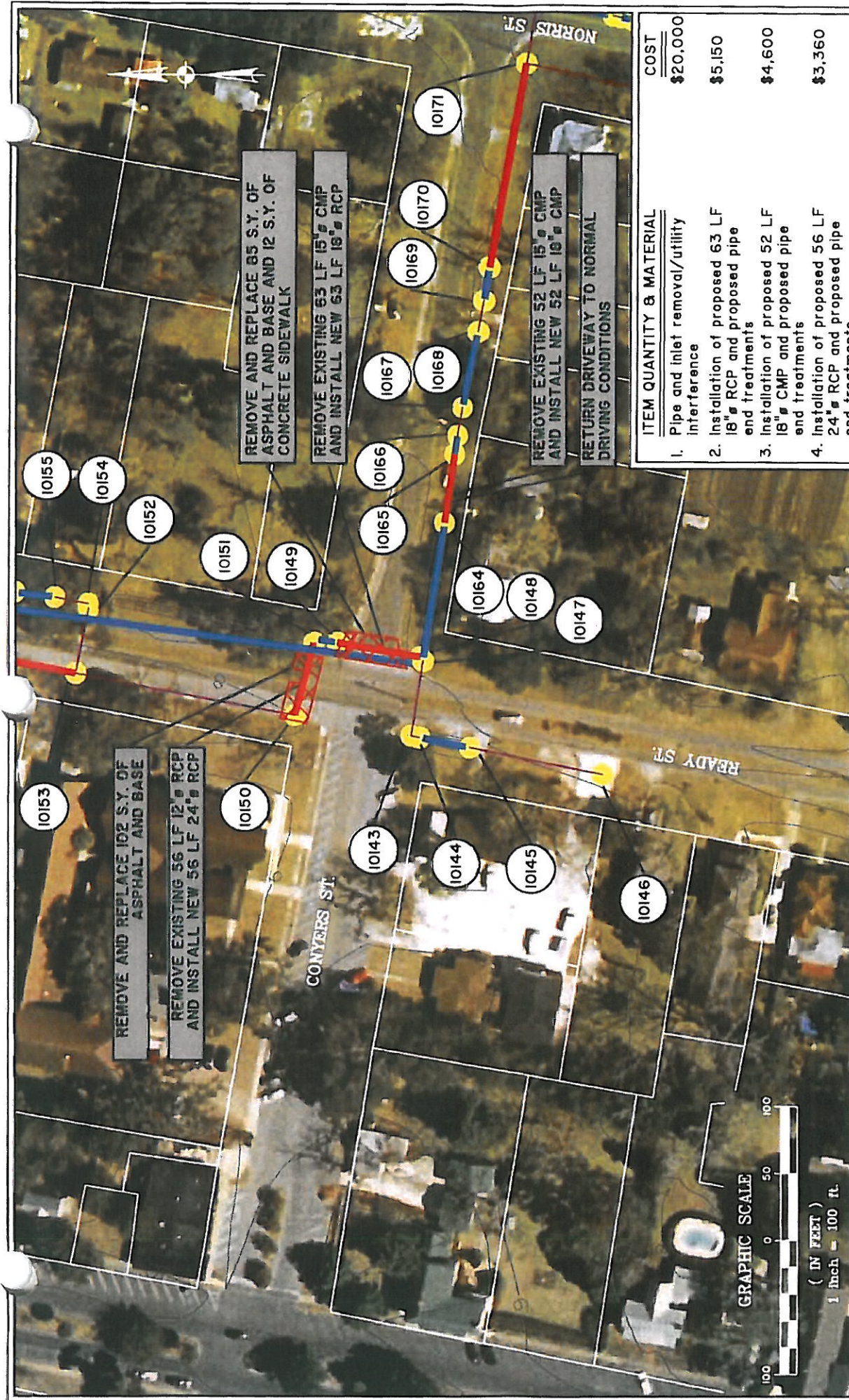


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The City of St. Marys

PROPOSED ACTIVITY:
 STORM WATER ANALYSIS
 CLIENT:
 THE CITY OF ST. MARYS
 GROUP "E"
 DATE: JANUARY 2008
 SHEET: 3 OF 5
 LOCATION: ST. MARYS, GA
 SCALE: 1"=100'



ITEM QUANTITY & MATERIAL

ITEM	QUANTITY	MATERIAL	COST
1. Pipe and inlet removal/utility interference			\$20,000
2. Installation of proposed 63 LF 18" RCP and proposed pipe and treatments			\$5,150
3. Installation of proposed 52 LF 18" CMP and proposed pipe and treatments			\$4,600
4. Installation of proposed 56 LF 24" RCP and proposed pipe and treatments			\$3,360
5. Remove and replace 187 S.Y. of asphalt and base			\$7,480
6. Remove and replace 12 S.Y. of concrete sidewalk			\$120
7. Return driveway to normal driving conditions			\$300

Sub-total	\$41010
30% Contingency	\$12,303
Total	\$53,313

* Prices does NOT include any utility relocation or interferences



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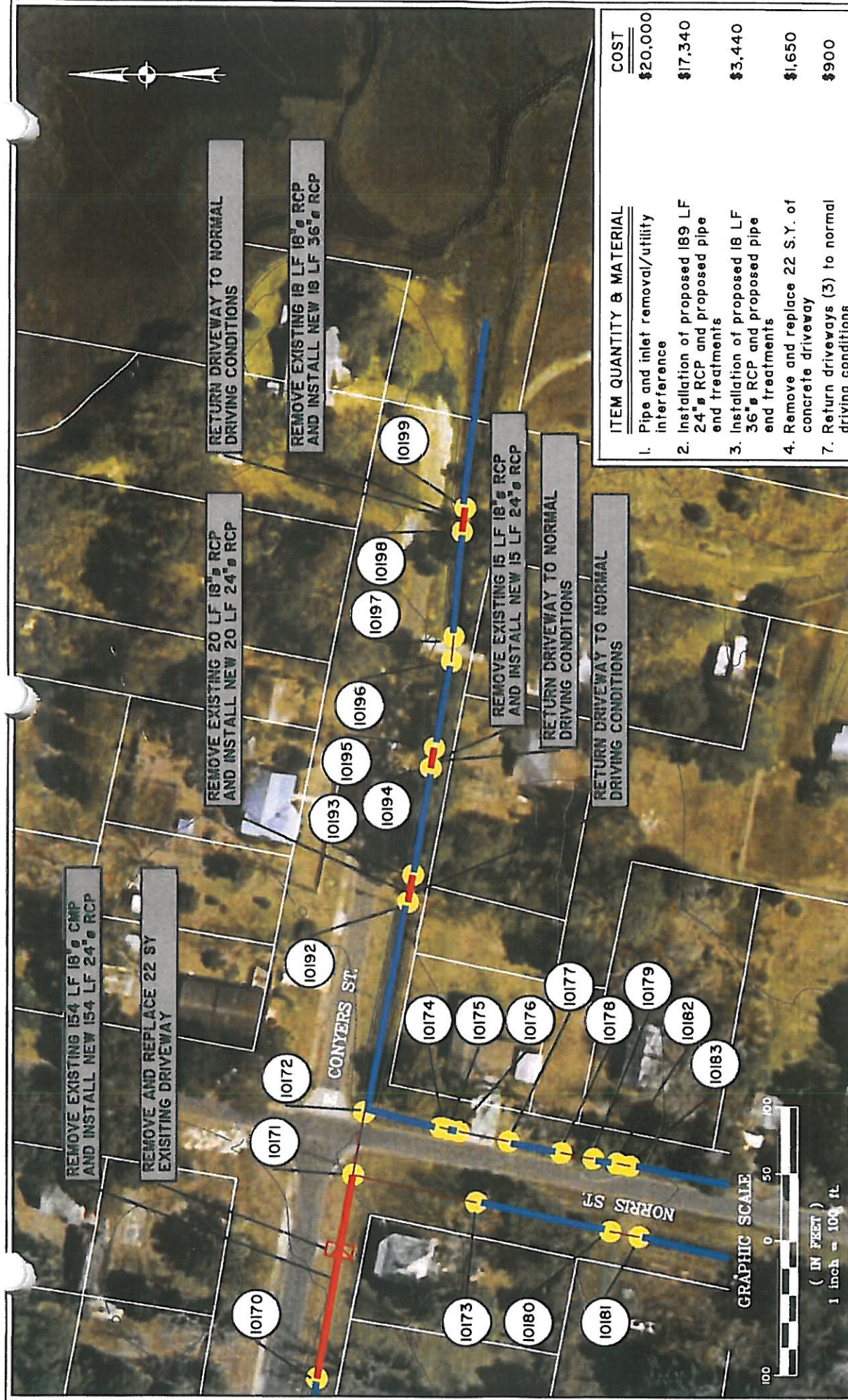
PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP "E"
SHEET: 4 OF 5
SCALE: 1"=100'



ITEM	QUANTITY & MATERIAL	COST
1.	Pipe and inlet removal/utility interference	\$20,000
2.	Installation of proposed 189 LF 24" RCP and proposed pipe end treatments	\$17,340
3.	Installation of proposed 18 LF 36" RCP and proposed pipe end treatments	\$3,440
4.	Remove and replace 22 S.Y. of concrete driveway	\$1,650
7.	Return driveways (3) to normal driving conditions	\$900

Sub-total	\$43,330
30% Contingency	\$12,999
Total	\$56,329

* Prices does NOT include any utility relocation or interferences



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The City of St. Marys

PROPOSED ACTIVITY:
 STORM WATER ANALYSIS

CLIENT:
 THE CITY OF ST. MARYS
 DATE: JANUARY 2008
 LOCATION: ST. MARYS, GA

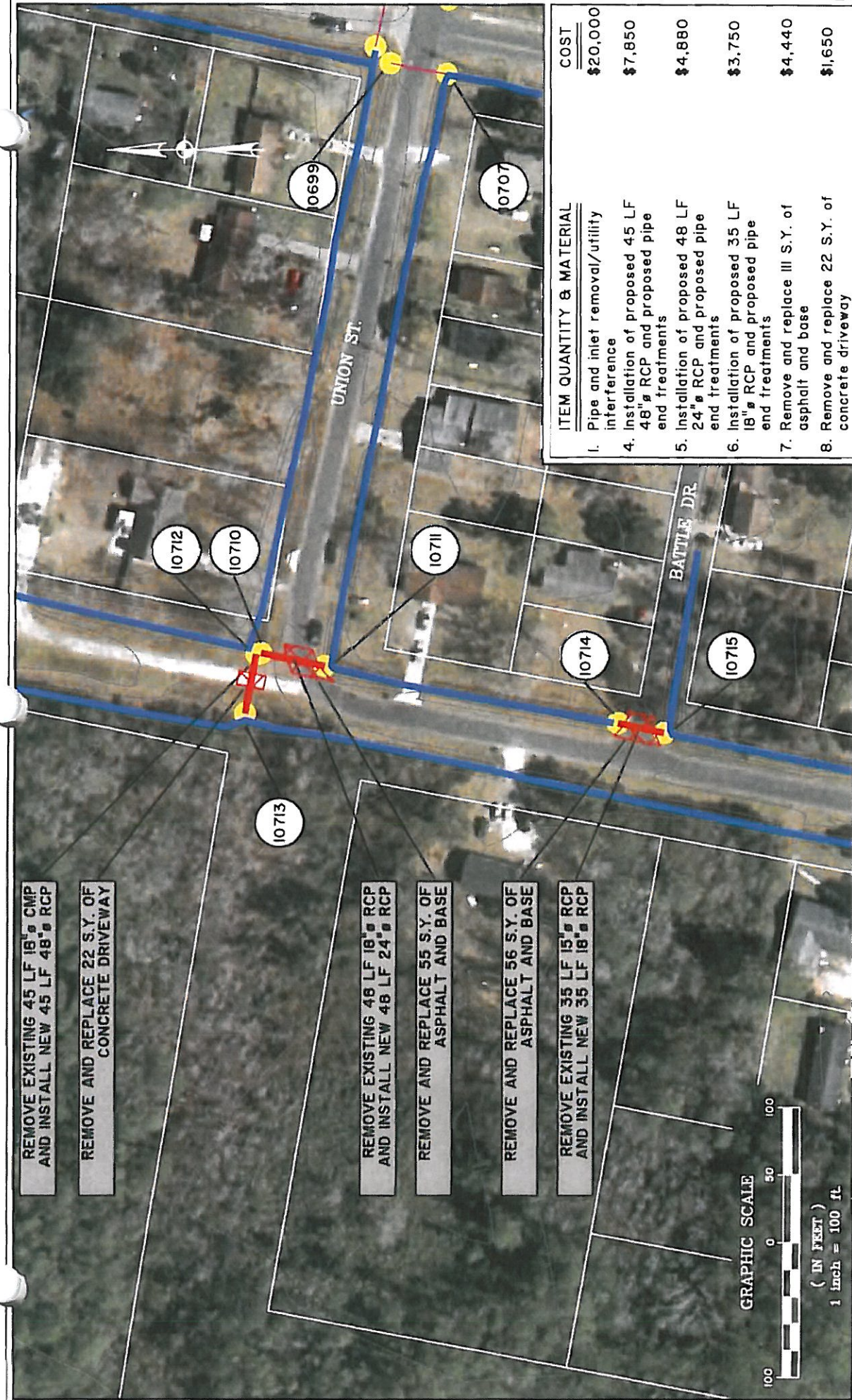
GROUP: "E"
 SHEET: 5 OF 5
 SCALE: 1"=100'



The City of St. Marys
PROPOSED ACTIVITY:
STORM WATER ANALYSIS
CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

GROUP: "F"
SHEET: 1 OF 7
SCALE: 1"= 300'

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ITEM	QUANTITY & MATERIAL	COST
1.	Pipe and inlet removal/utility interference	\$20,000
4.	Installation of proposed 45 LF 48" RCP and proposed pipe end treatments	\$7,850
5.	Installation of proposed 48 LF 24" RCP and proposed pipe end treatments	\$4,880
6.	Installation of proposed 35 LF 18" RCP and proposed pipe end treatments	\$3,750
7.	Remove and replace III S.Y. of asphalt and base	\$4,440
8.	Remove and replace 22 S.Y. of concrete driveway	\$1,650

Sub-total	\$42,570
30% Contingency	\$12,771
Total	\$55,341

* Prices does NOT include any utility relocation or interferences

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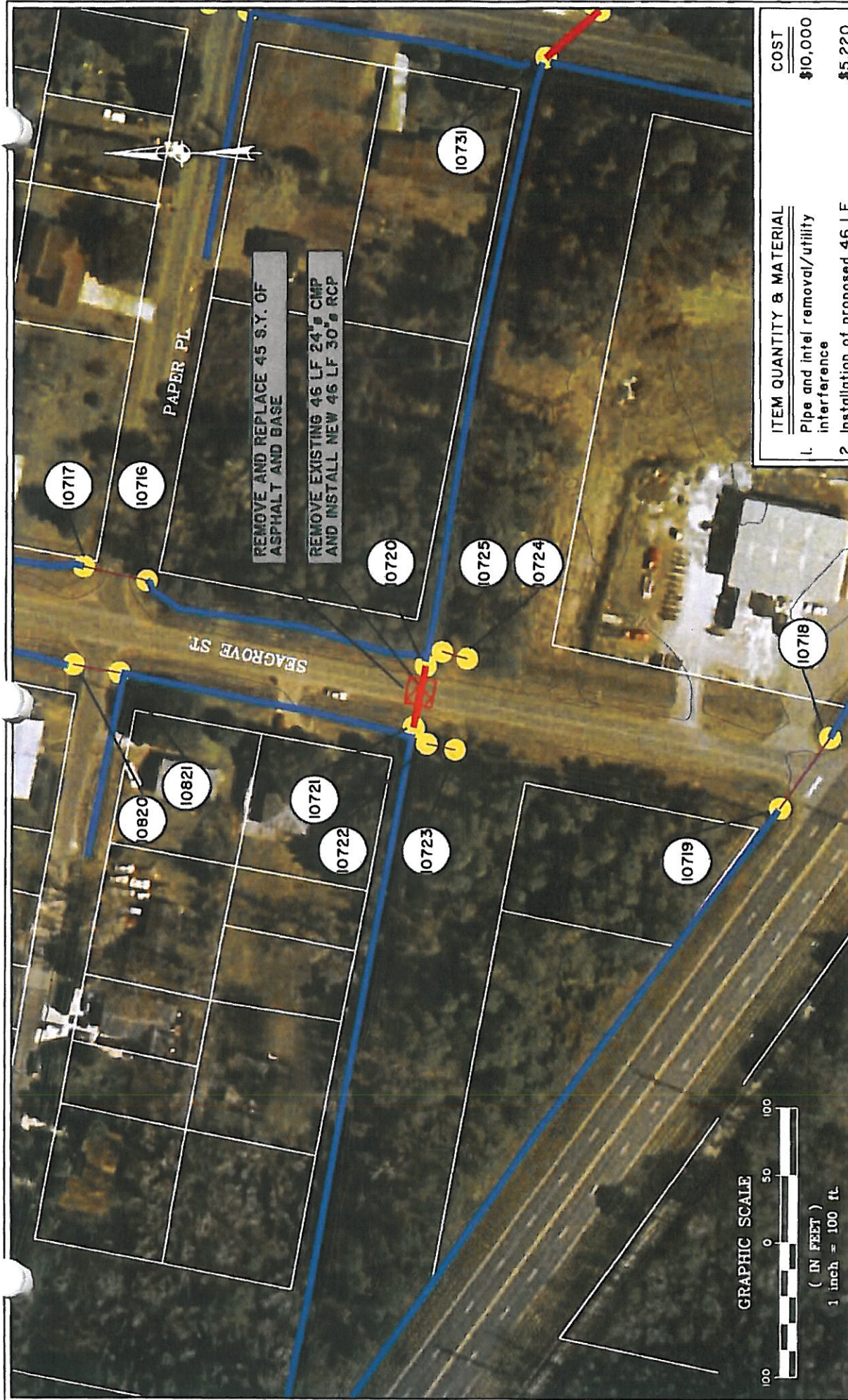
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The City of St. Marys
 PROPOSED ACTIVITY:
 STORM WATER ANALYSIS

CLIENT:
 THE CITY OF ST. MARYS

DATE: JANUARY 2008
 LOCATION: ST. MARYS, GA

GROUP: "F"
 SHEET: 2 OF 7
 SCALE: 1"=100'



The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "F"

SHEET: 3 OF 7

SCALE: 1"=100'



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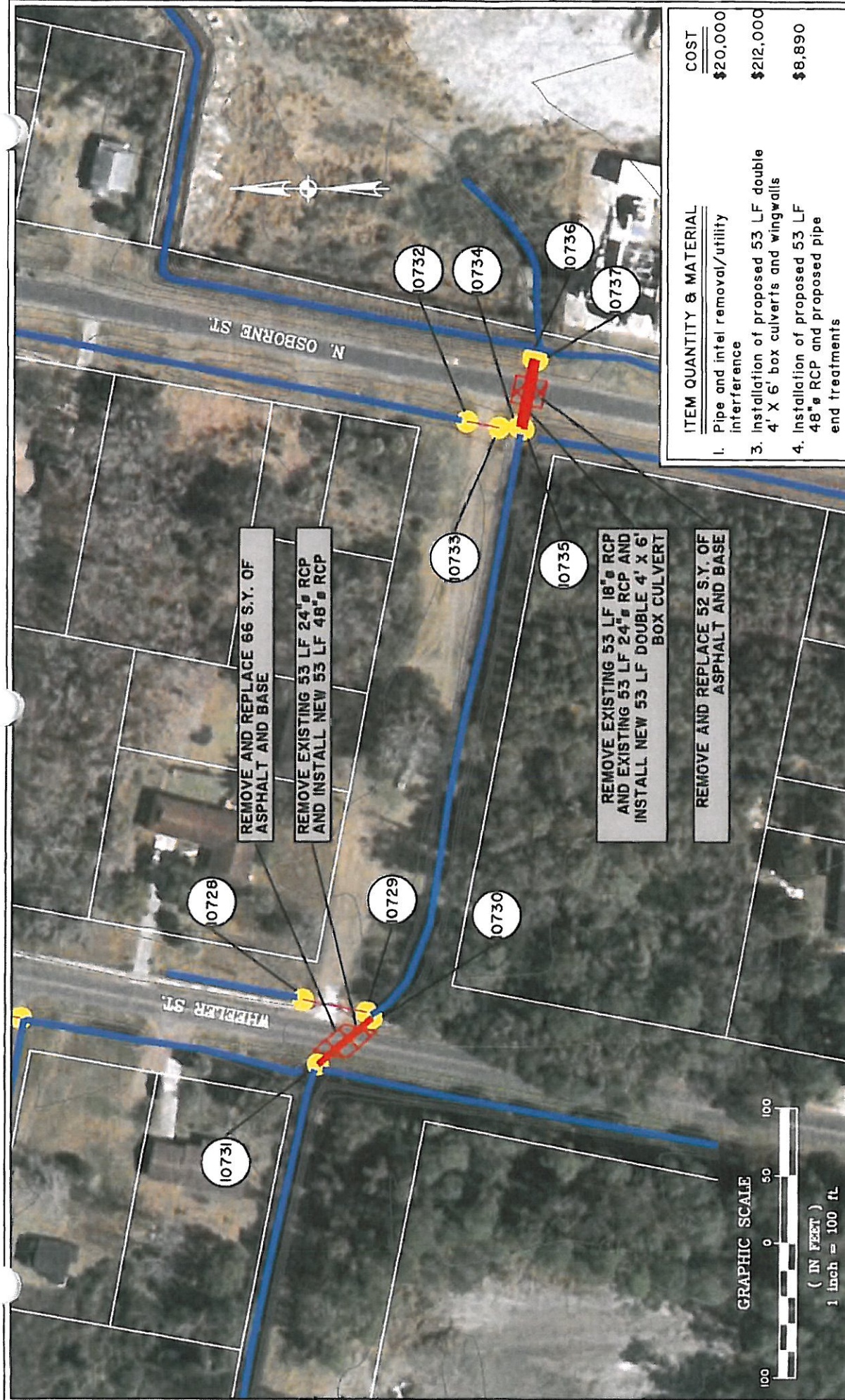
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ITEM QUANTITY & MATERIAL

ITEM	QUANTITY & MATERIAL	COST
1.	Pipe and intel removal/utility interference	\$10,000
2.	Installation of proposed 46 LF 30" RCP and proposed pipe end treatments	\$5,220
3.	Remove and replace 45 S.Y. of asphalt and base	\$1,800
Sub-total		\$17,020
30% Contingency		\$5,106
Total		\$22,126

* Prices does NOT include any utility relocation or interferences



ITEM	QUANTITY & MATERIAL	COST
1.	Pipe and intel removal/utility interference	\$20,000
3.	Installation of proposed 53 LF double 4' X 6' box culverts and wingwalls	\$212,000
4.	Installation of proposed 53 LF 48\" RCP and proposed pipe end treatments	\$8,890
5.	Remove and replace 118 S.Y. of asphalt and base	\$4,720

Sub-total	\$245,610
30% Contingency	\$73,683
Total	\$319,293

* Prices does NOT include any utility relocation or interferences



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The City of St. Marys

PROPOSED ACTIVITY:
 STORM WATER ANALYSIS

CLIENT:
 THE CITY OF ST. MARYS

DATE: JANUARY 2008

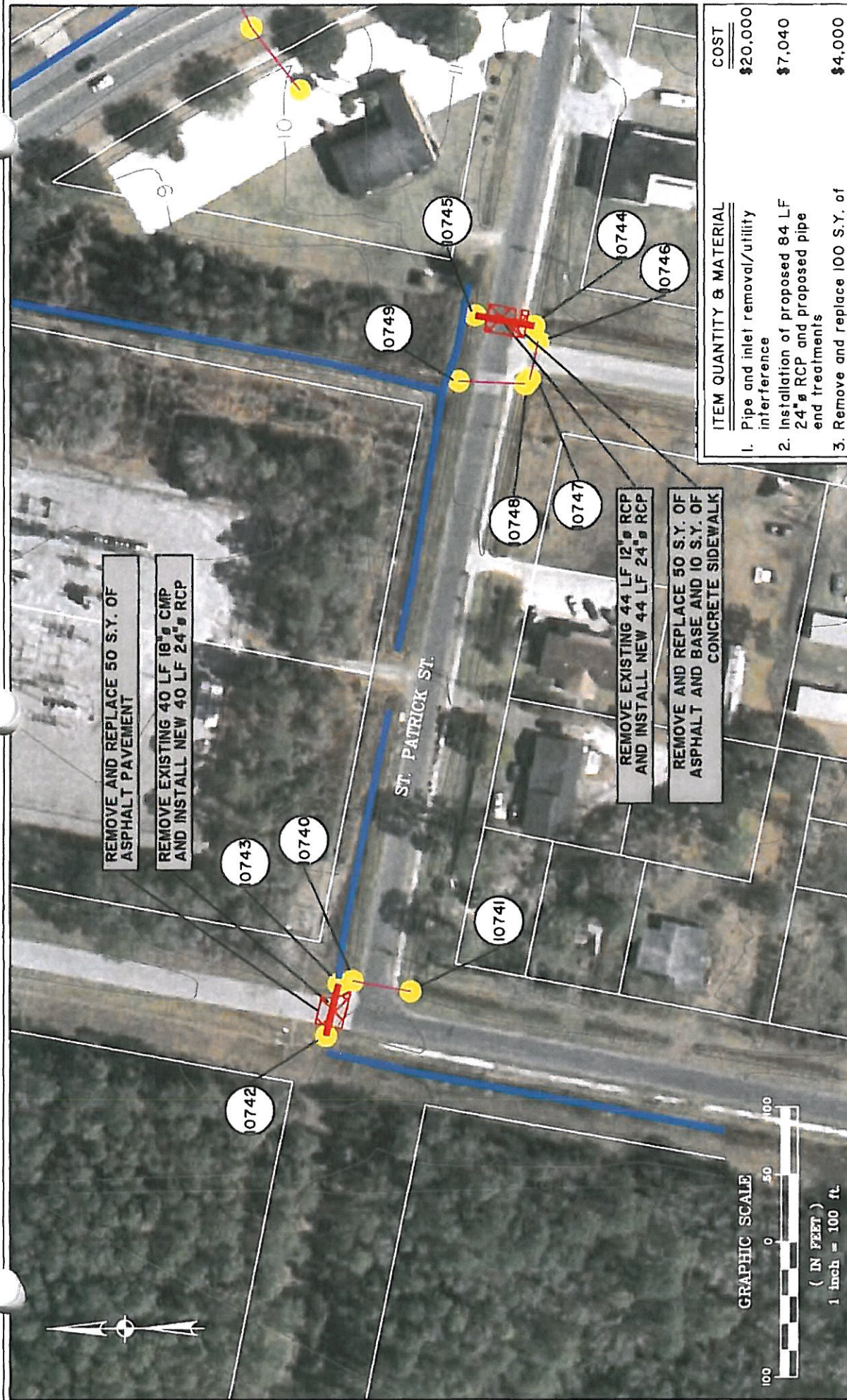
LOCATION: ST. MARYS, GA

GROUP: "F"

SHEET: 4 OF 7

SCALE: 1"=100'





ITEM QUANTITY & MATERIAL		COST
1. Pipe and inlet removal/utility interference		\$20,000
2. Installation of proposed 84 LF 24" RCP and proposed pipe end treatments		\$7,040
3. Remove and replace 100 S.Y. of asphalt and base		\$4,000
4. Remove and replace 10 S.Y. of concrete sidewalk		\$100
Sub-total		\$31,140
30% Contingency		\$9,342
Total		\$40,482

* Prices does NOT include any utility relocation or interferences



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The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "F"

SHEET: 5 OF 7

SCALE: 1"=100'





GRAPHIC SCALE



The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:

THE CITY OF ST. MARYS

DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "F"

SHEET: 6 OF 7

SCALE: 1"=100'



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ITEM QUANTITY & MATERIAL

1. Pipe and inlet removal/utility interference
2. Installation of proposed 86 LF 24" RCP and proposed pipe end treatments
3. Remove and replace 90 S.Y. of asphalt and base

COST

\$10,000

\$7,160

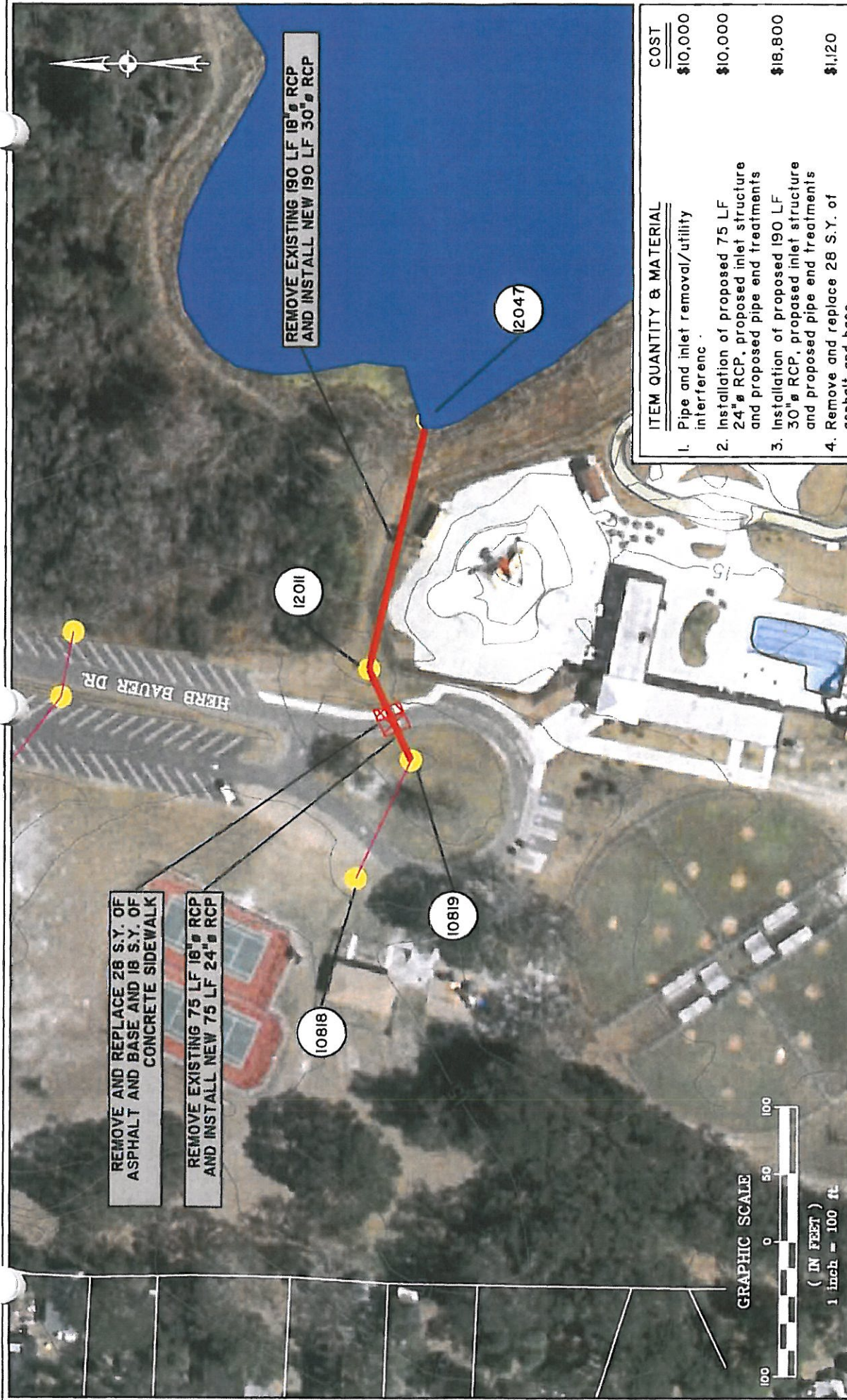
\$3,600

Sub-total \$20,760

30% Contingency \$6,228

Total \$26,988

* Prices does NOT include any utility relocation or interferences



ITEM QUANTITY & MATERIAL		COST
1. Pipe and inlet removal/utility interference		\$10,000
2. Installation of proposed 75 LF 24" RCP, proposed inlet structure and proposed pipe end treatments		\$10,000
3. Installation of proposed 190 LF 30" RCP, proposed inlet structure and proposed pipe end treatments		\$18,800
4. Remove and replace 28 S.Y. of asphalt and base		\$1,120
5. Remove and replace 18 S.Y. of concrete sidewalk		\$180
Sub-total		\$40,100
30% Contingency		\$12,030
Total		\$52,130

* Prices does NOT include any utility relocation or interferences

The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "F"

SHEET: 7 OF 7

SCALE: 1"=100'



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The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

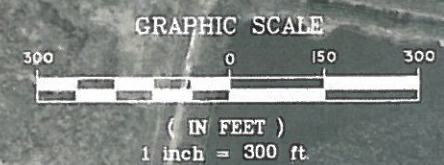
GROUP: "G"
SHEET: 1 OF 5
SCALE: 1" = 300'

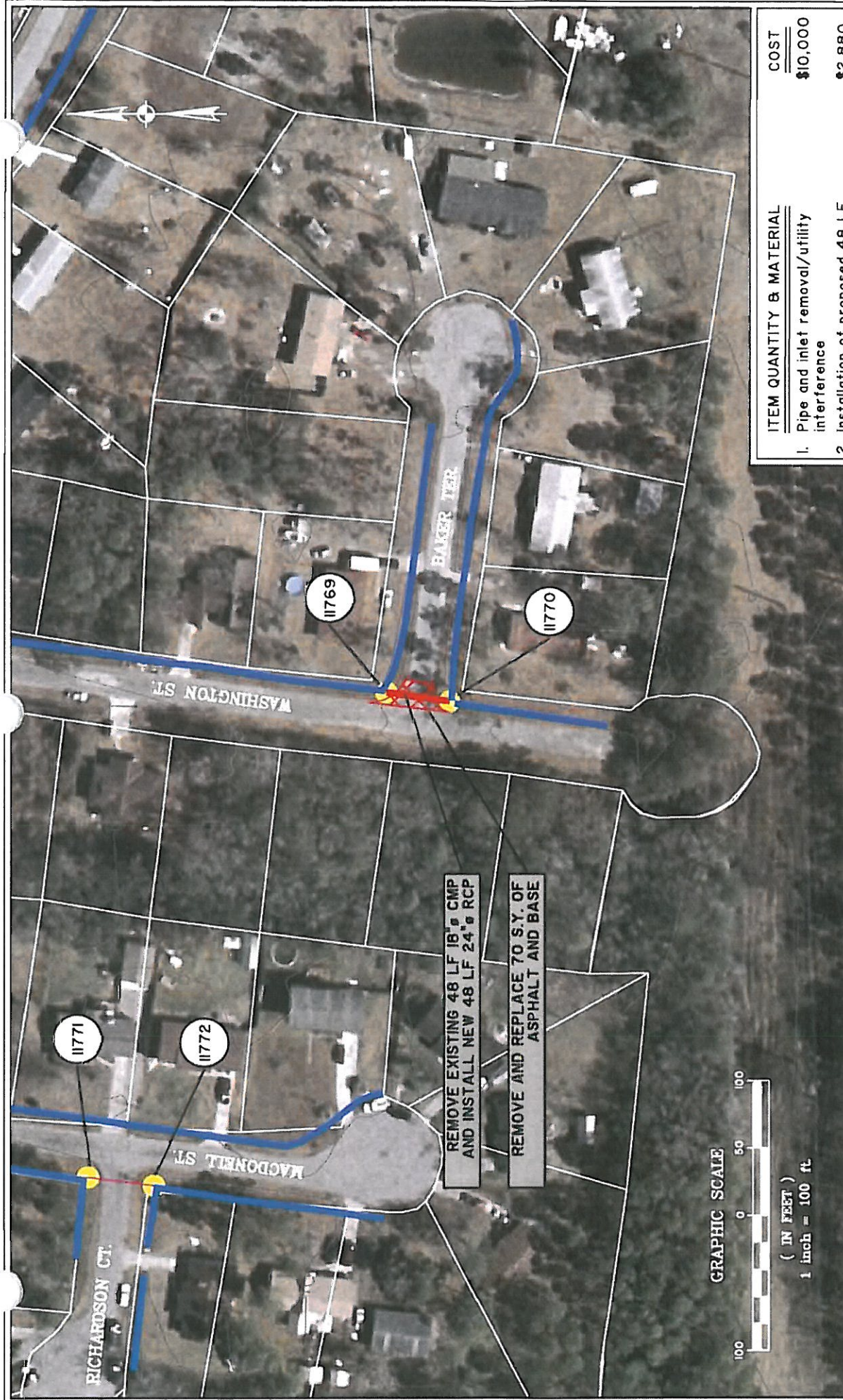


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REMOVE EXISTING 48 LF 18" CMP
AND INSTALL NEW 48 LF 24" RCP

REMOVE AND REPLACE 70 S.Y. OF
ASPHALT AND BASE

GRAPHIC SCALE

(IN FEET)

1 inch = 100 ft

ITEM QUANTITY & MATERIAL

1. Pipe and inlet removal/utility interference
2. Installation of proposed 48 LF 24" RCP and proposed pipe end treatments
3. Remove and replace 70 S.Y. of asphalt and base

COST
\$10,000

\$2,880

\$2,800

\$15,680

\$4,704

\$20,384

Sub-total

30% Contingency

Total

* Prices does NOT include any utility relocation or interferences



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PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

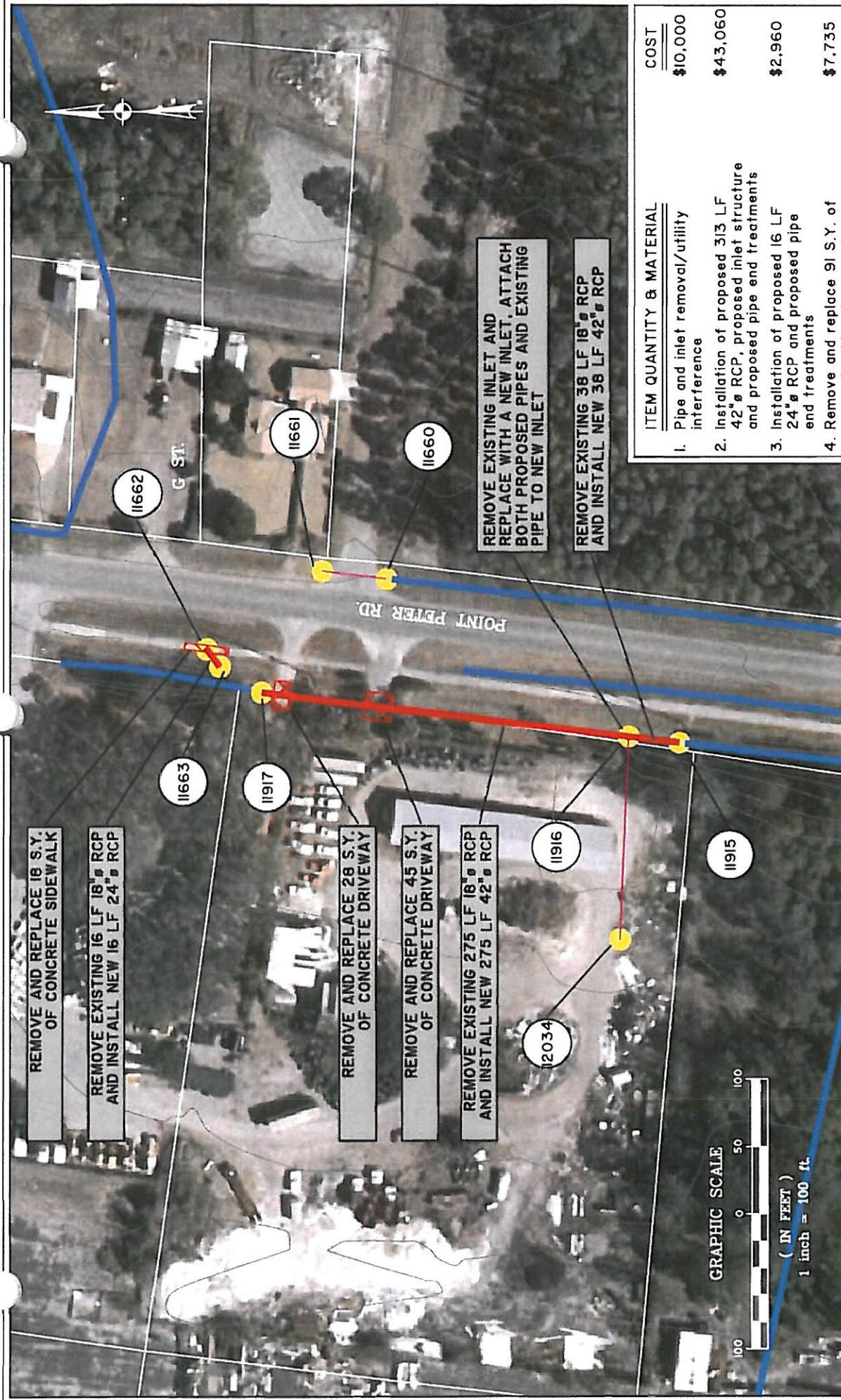
DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "G"

SHEET: 2 OF 5

SCALE: 1"=100'



ITEM QUANTITY & MATERIAL		COST
1. Pipe and inlet removal/utility interference		\$10,000
2. Installation of proposed 313 LF 42" RCP, proposed inlet structure and proposed pipe end treatments		\$43,060
3. Installation of proposed 16 LF 24" RCP and proposed pipe end treatments		\$2,960
4. Remove and replace 91 S.Y. of concrete sidewalk and driveway		\$7,735
5. Attaching existing pipe to proposed inlet structure		\$3,500
Sub-total		\$67,255
30% Contingency		\$20,176.50
Total		\$87,431.50

* Prices does NOT include any utility relocation or interferences

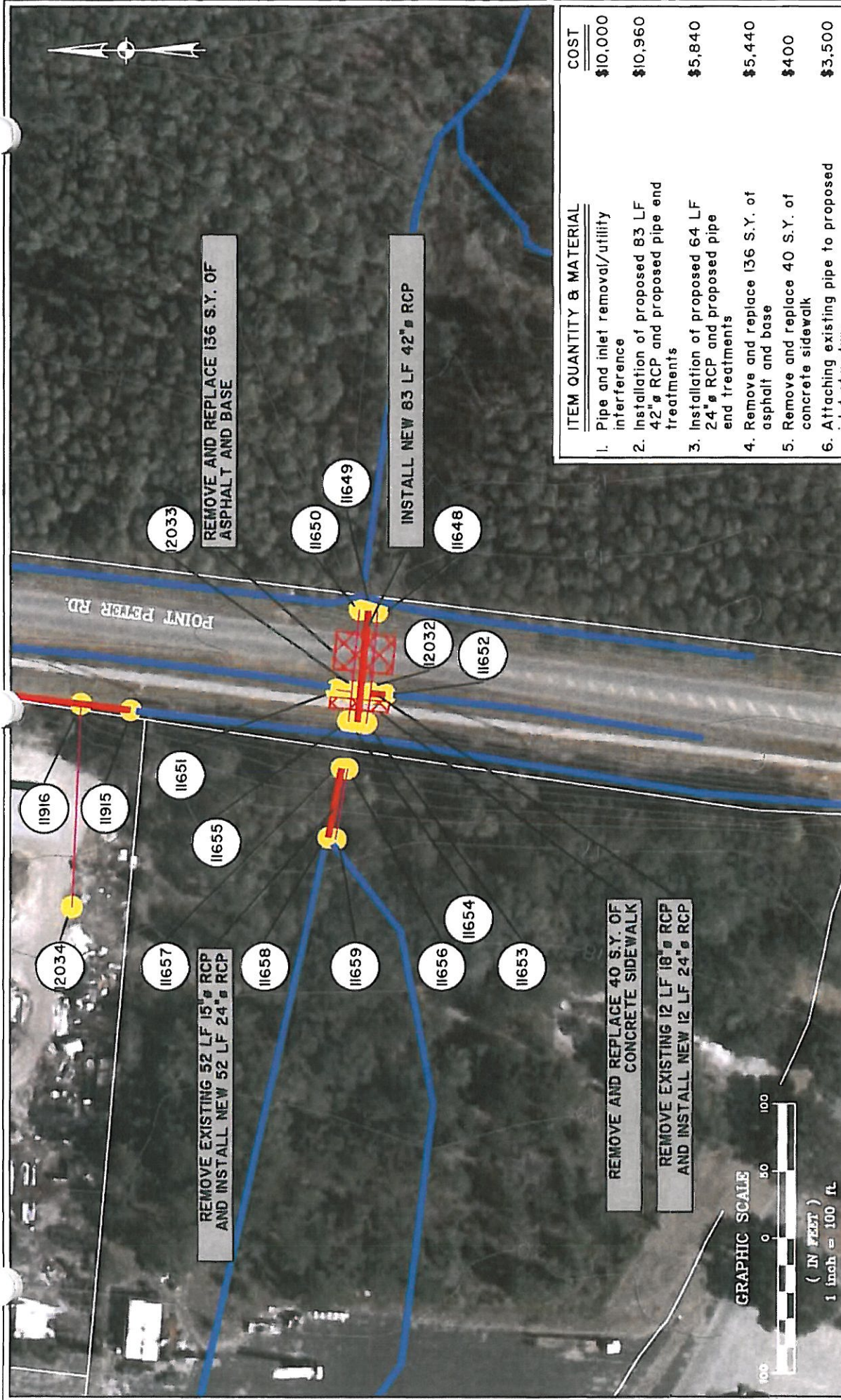


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PROPOSED ACTIVITY:
STORM WATER ANALYSIS
CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

GROUP: "G"
SHEET: 3 OF 5
SCALE: 1"=100'



ITEM QUANTITY & MATERIAL		COST
1. Pipe and inlet removal/utility interference		\$10,000
2. Installation of proposed 83 LF 42" RCP and proposed pipe end treatments		\$10,960
3. Installation of proposed 64 LF 24" RCP and proposed pipe end treatments		\$5,840
4. Remove and replace 136 S.Y. of asphalt and base		\$5,440
5. Remove and replace 40 S.Y. of concrete sidewalk		\$400
6. Attaching existing pipe to proposed inlet structure		\$3,500
Sub-total		\$36,140
30% Contingency		\$10,842
Total		\$46,982

* Prices does NOT include any utility relocation or interferences



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PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

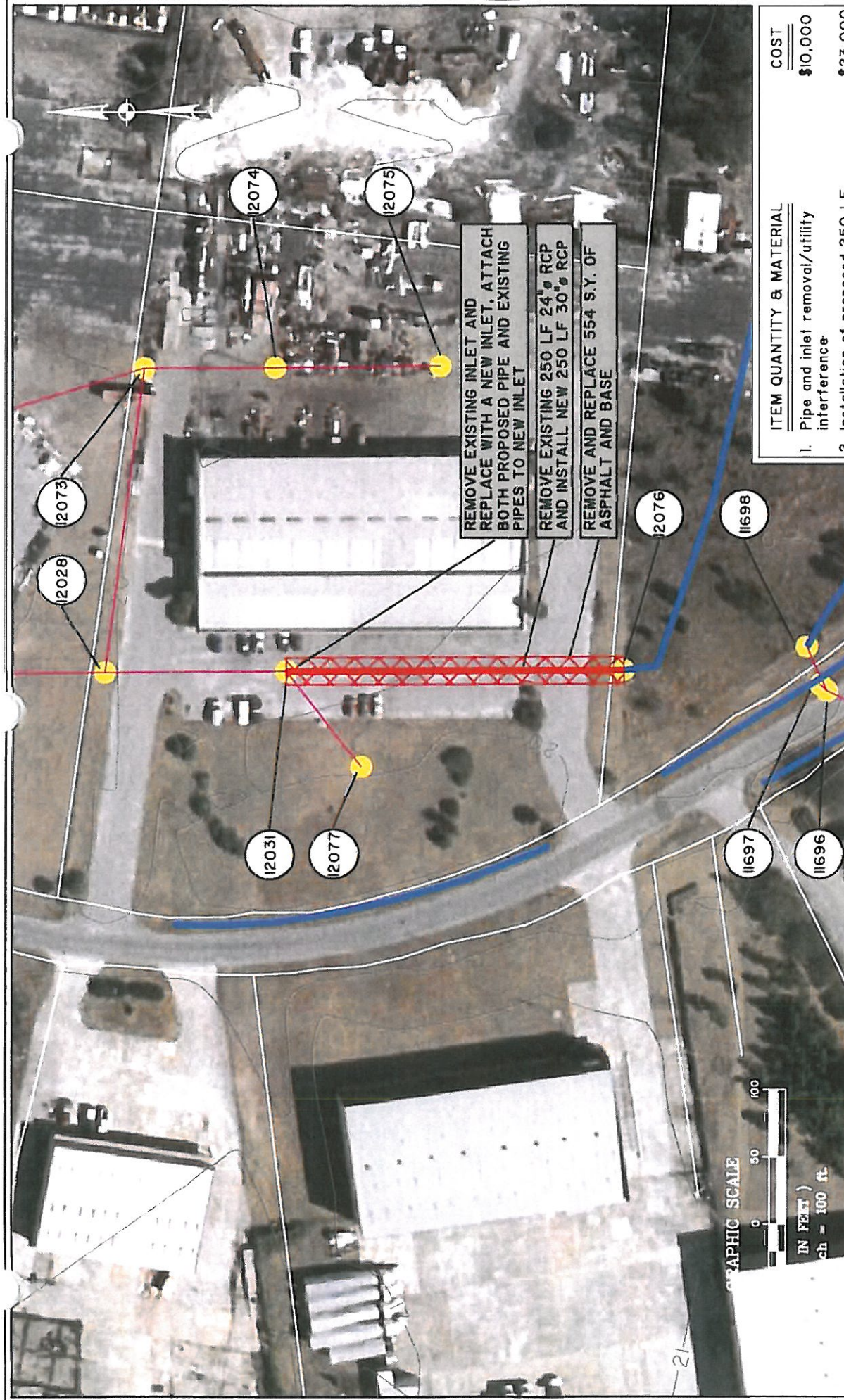
DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "G"

SHEET: 4 OF 5

SCALE: 1"=100'



ITEM	QUANTITY & MATERIAL	COST
1.	Pipe and inlet removal/utility interference	\$10,000
2.	Installation of proposed 250 LF 30" RCP, proposed inlet structure and proposed pipe end treatment	\$23,000
3.	Remove and replace 554 S.Y. of asphalt and base	\$22,160
4.	Attaching existing pipes to proposed inlet structure	\$3,500
Sub-total		\$58,660
30% Contingency		\$17,598
Total		\$76,258

* Prices does NOT include any utility relocation or interferences



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PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

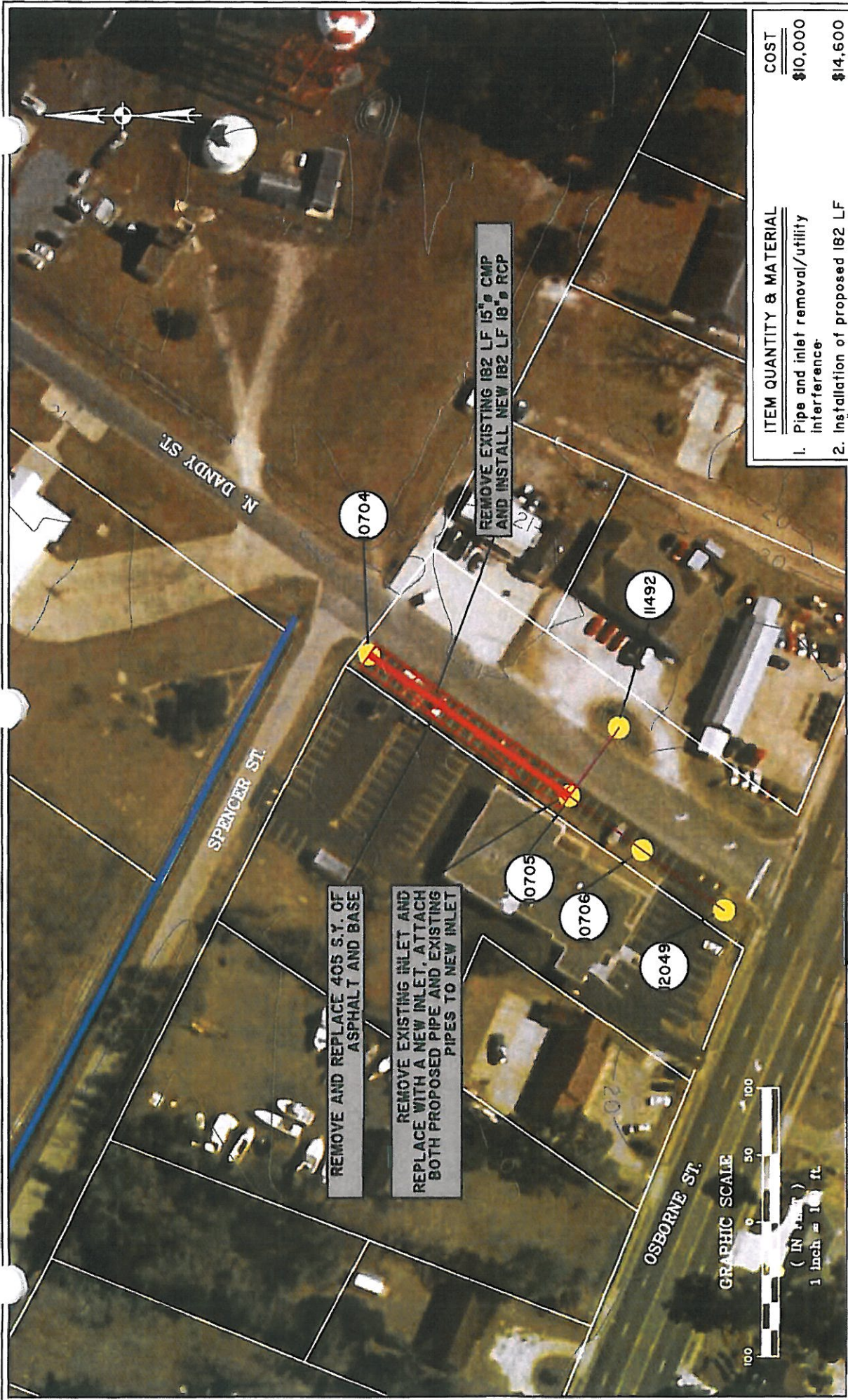
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

GROUP: "G"
SHEET: 5 OF 5
SCALE: 1"=100'



The City of St. Marys
PROPOSED ACTIVITY:
STORM WATER ANALYSIS
CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA
GROUP: "H"
SHEET: I OF 4
SCALE: 1"= 300'

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ITEM QUANTITY & MATERIAL		COST
1. Pipe and inlet removal/utility interference		\$10,000
2. Installation of proposed 182 LF 18" RCP, proposed inlet structure and proposed pipe end treatments		\$14,600
3. Remove and replace 405 S.Y. of asphalt and base		\$16,200
4. Attaching existing pipes to proposed inlet structure		\$3,500
Sub-total		\$44,300
30% Contingency		\$13,290
Total		\$57,590

* Prices does NOT include any utility relocation or interferences

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PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

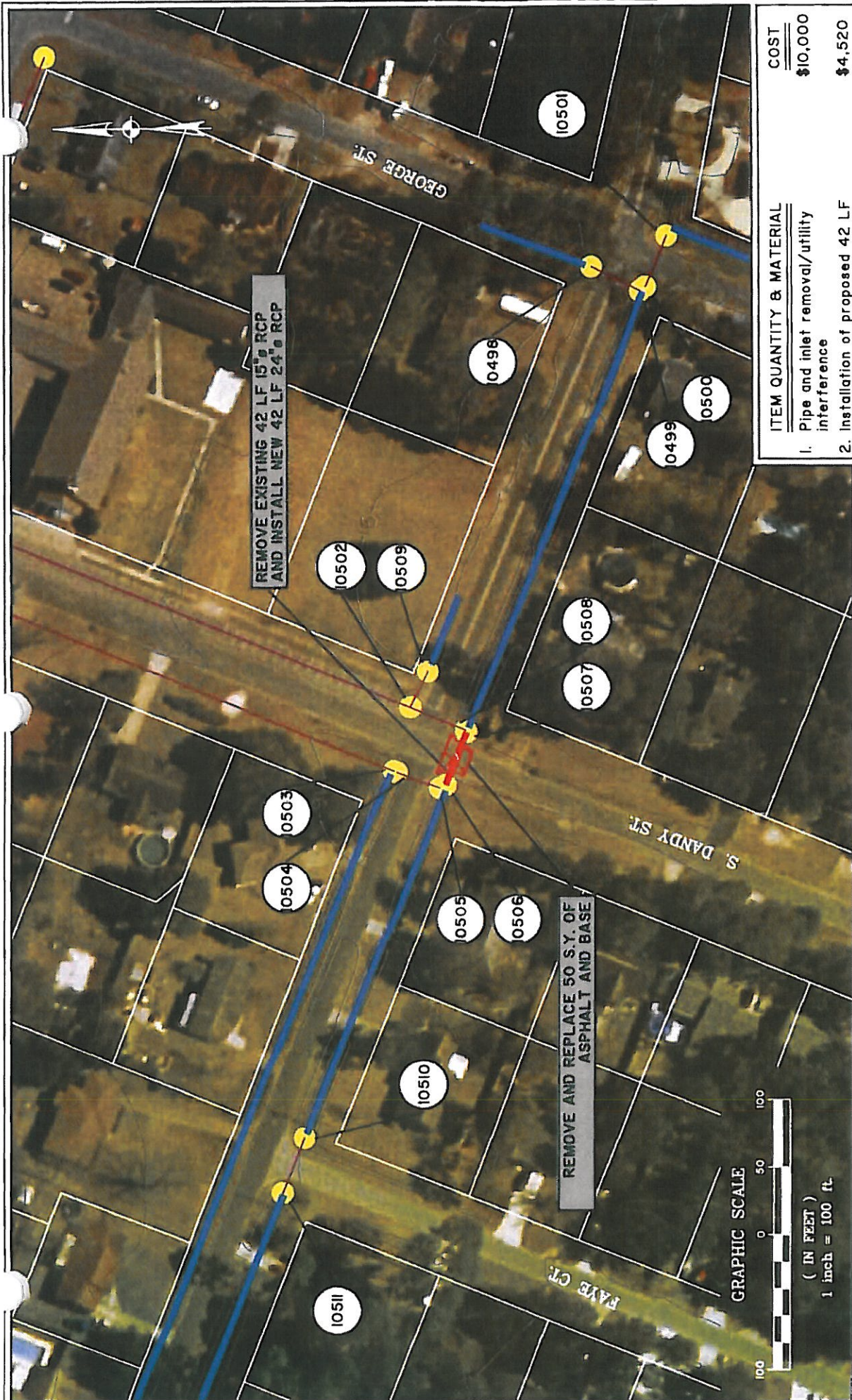
DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "H"

SHEET: 2 OF 4

SCALE: 1"=100'



<u>ITEM QUANTITY & MATERIAL</u>		<u>COST</u>
1.	Pipe and inlet removal/utility interference	\$10,000
2.	Installation of proposed 42 LF 24" RCP and proposed pipe end treatments	\$4,520
3.	Remove and replace 50 S.Y. of asphalt and base	\$2,000
Sub-total		\$16,520
30% Contingency		\$4,956
Total		\$21,476

* Prices does NOT include any utility relocation or interferences

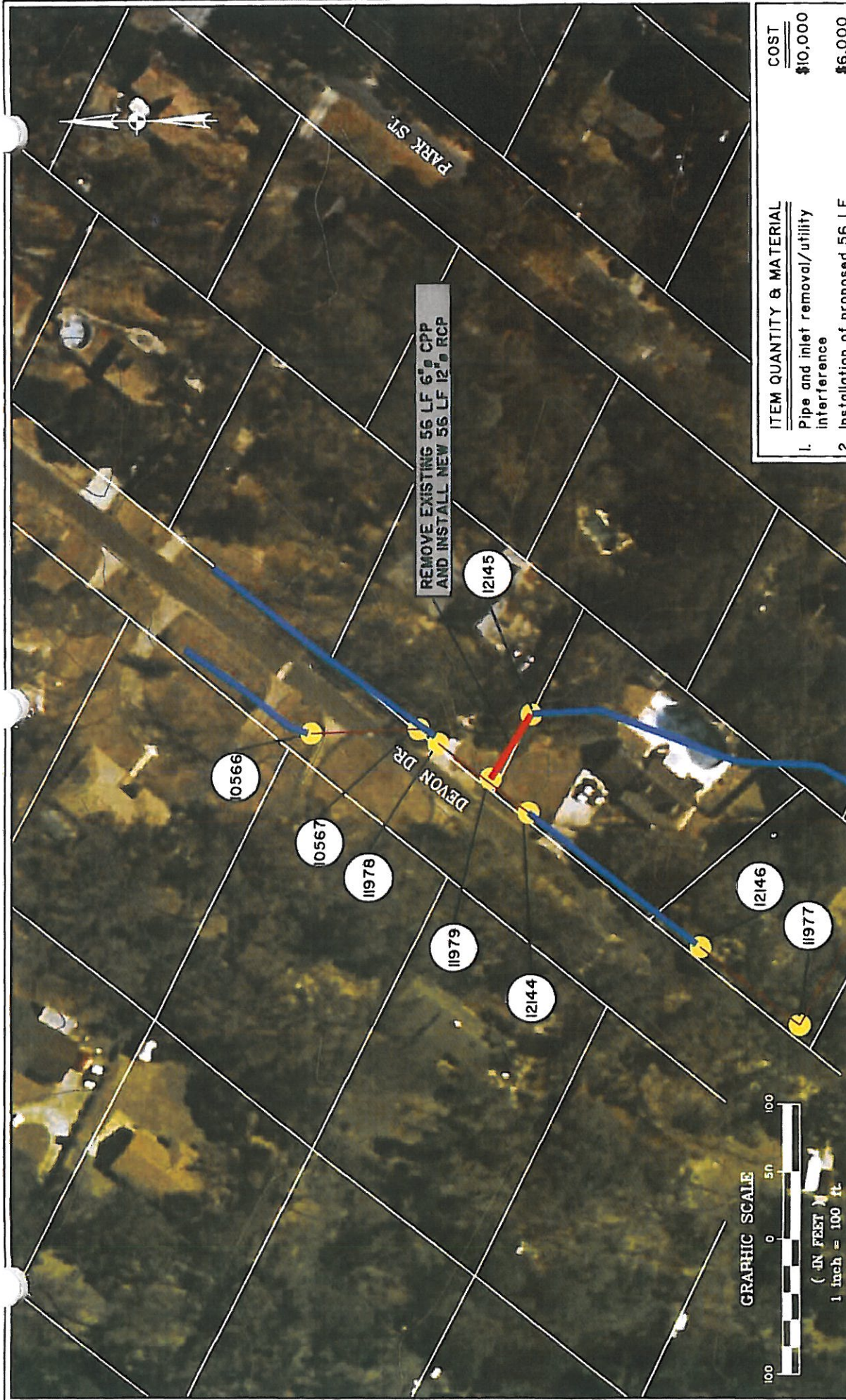


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PROPOSED ACTIVITY:
 STORM WATER ANALYSIS
 CLIENT:
 THE CITY OF ST. MARYS
 DATE: JANUARY 2008
 LOCATION: ST. MARYS, GA
 GROUP: "H"
 SHEET: 3 OF 4
 SCALE: 1"=100'



REMOVE EXISTING 56 LF 6" CPP
AND INSTALL NEW 56 LF 12" RCP

ITEM QUANTITY & MATERIAL		COST
1.	Pipe and inlet removal/utility interference	\$10,000
2.	Installation of proposed 56 LF 12" RCP and proposed pipe end treatments	\$6,000
Sub-total		\$16,000
30% Contingency		\$4,800
Total		\$20,800

* Prices does NOT include any utility relocation or interferences



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PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "H"

SHEET: 4 OF 4

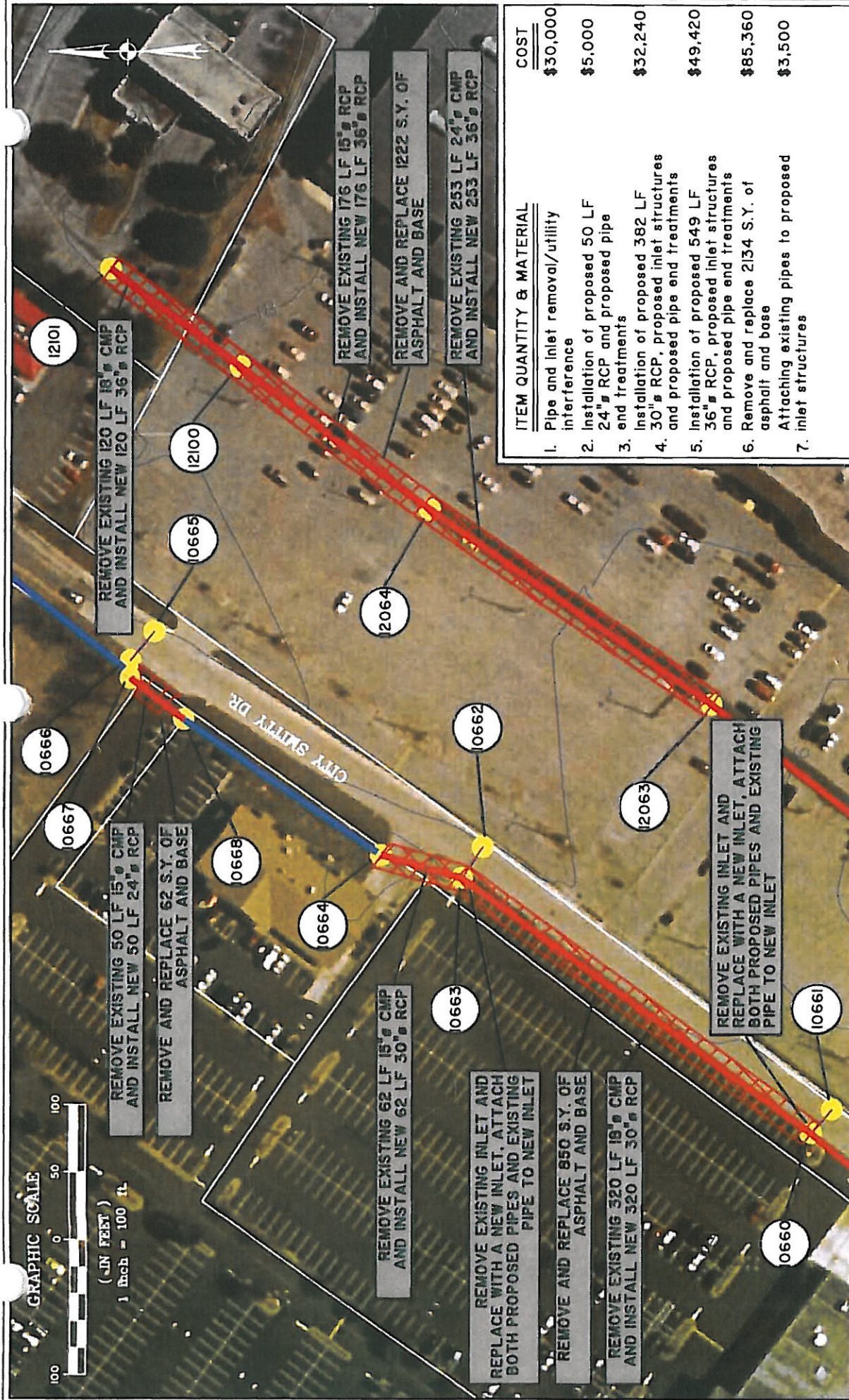
SCALE: 1"=100'



The City of St. Marys
PROPOSED ACTIVITY:
STORM WATER ANALYSIS
CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA
GROUP: "I"
SHEET: 1 OF 4
SCALE: 1" = 300'

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ITEM QUANTITY & MATERIAL

1. Pipe and Inlet removal/utility interference
2. Installation of proposed 50 LF 24" RCP and proposed pipe and treatments
3. Installation of proposed 382 LF 30" RCP. proposed inlet structures and proposed pipe and treatments
4. Installation of proposed 549 LF 36" RCP. proposed inlet structures and proposed pipe and treatments
5. Remove and replace 2134 S.Y. of asphalt and base
6. Attaching existing pipes to proposed inlet structures
- 7.

COST
\$30,000
\$5,000
\$32,240
\$49,420
\$85,360
\$3,500

Sub-total	\$205,520
30% Contingency	\$61,656
Total	\$267,176

* Prices does NOT include any utility relocation or interferences



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PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

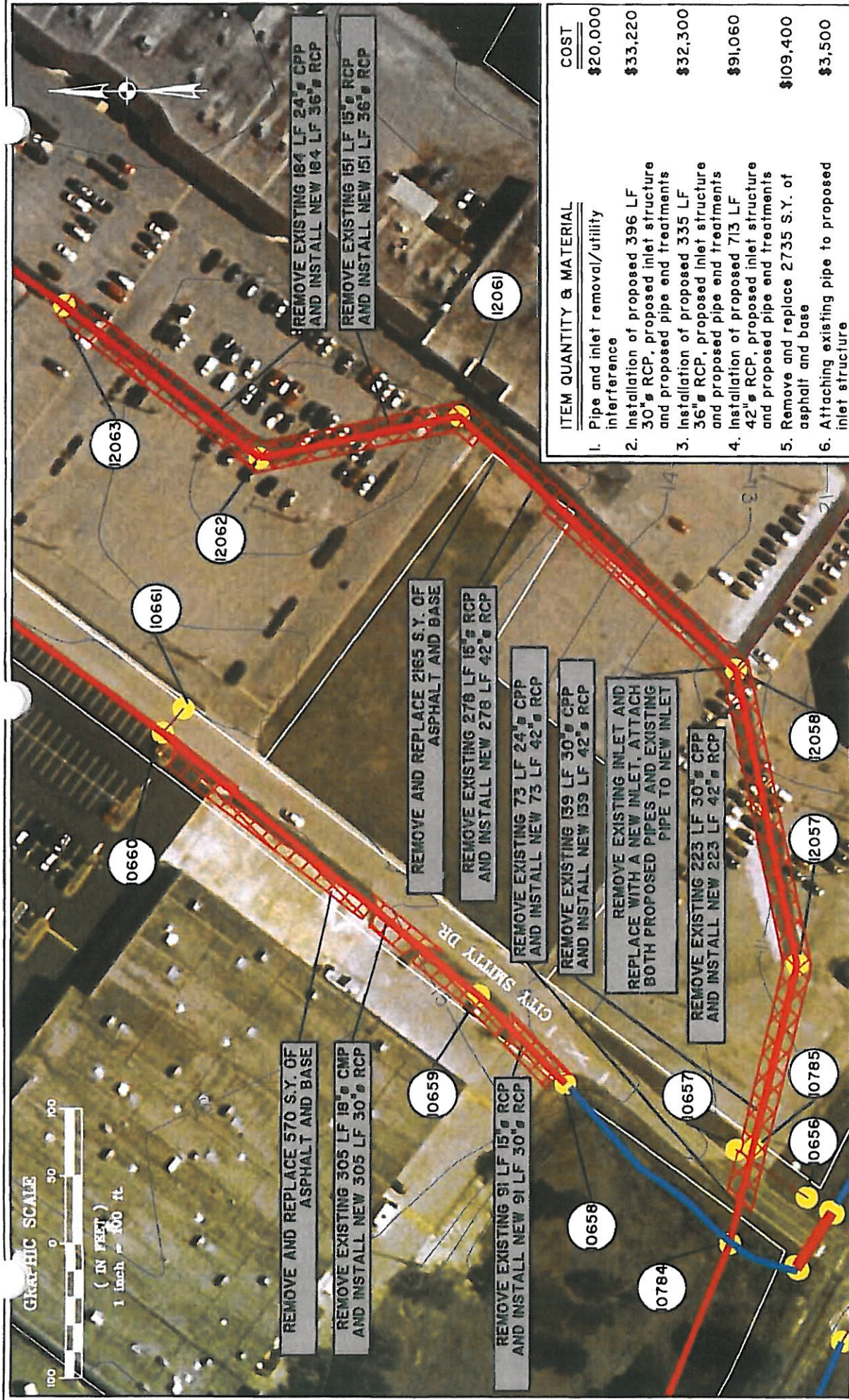
DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "I"

SHEET: 2 OF 4

SCALE: 1"=100'



ITEM	QUANTITY & MATERIAL	COST
1.	Pipe and inlet removal/utility interference	\$20,000
2.	Installation of proposed 396 LF 30" RCP, proposed inlet structure and proposed pipe and treatments	\$33,220
3.	Installation of proposed 335 LF 36" RCP, proposed inlet structure and proposed pipe and treatments	\$32,300
4.	Installation of proposed 713 LF 42" RCP, proposed inlet structure and proposed pipe and treatments	\$91,060
5.	Remove and replace 2735 S.Y. of asphalt and base	\$109,400
6.	Attaching existing pipe to proposed inlet structure	\$3,500

Sub-total	\$289,480
30% Contingency	\$86,844
Total	\$376,324

* Prices does NOT include any utility relocation or interference



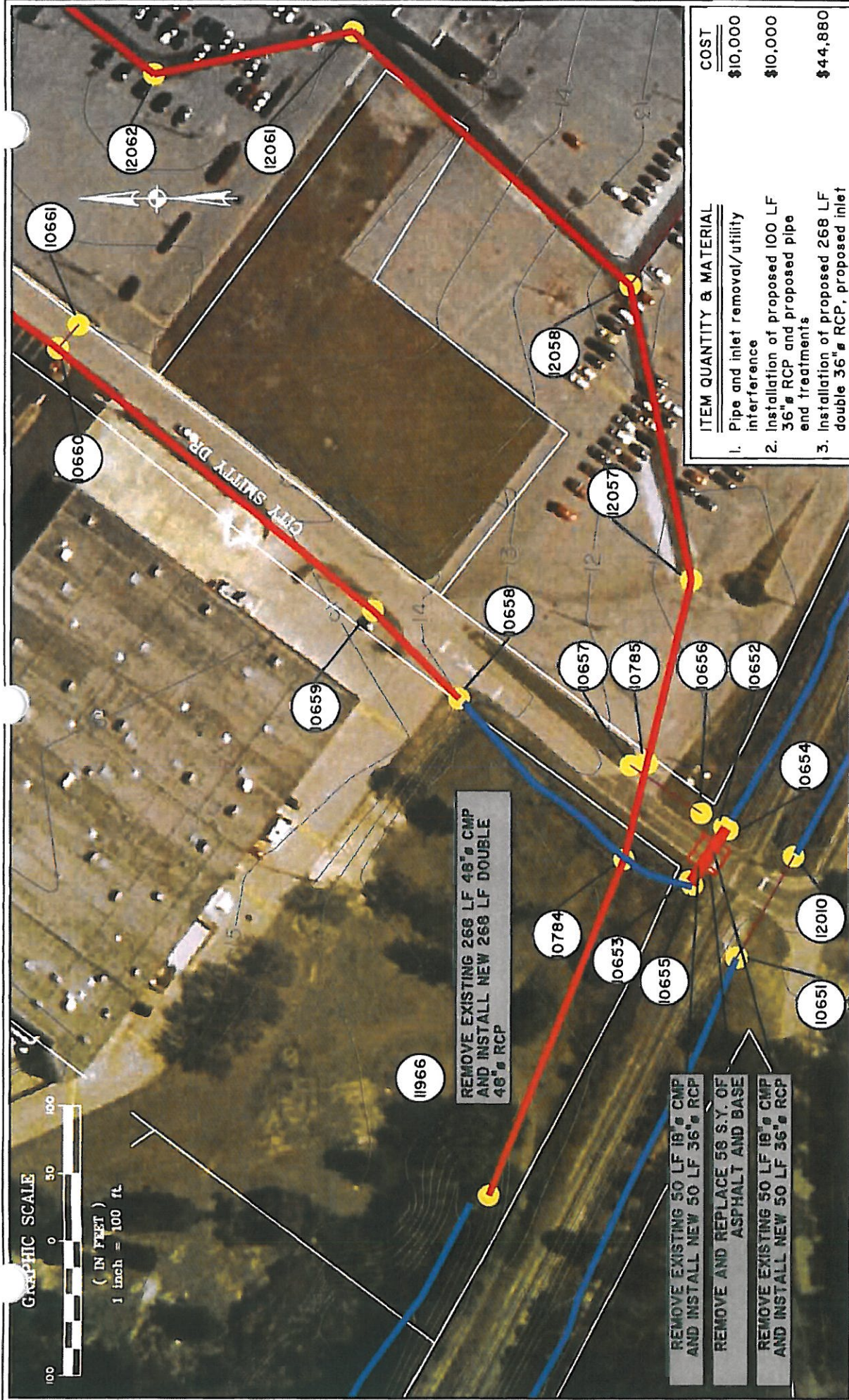
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PROPOSED ACTIVITY:
STORM WATER ANALYSIS
CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA
GROUP: "I"
SHEET: 3 OF 4
SCALE: 1"=100'



ITEM QUANTITY & MATERIAL		COST
1. Pipe and inlet removal/utility interference		\$10,000
2. Installation of proposed 100 LF 36" RCP and proposed pipe end treatments		\$10,000
3. Installation of proposed 268 LF double 36" RCP, proposed inlet structure and proposed pipe end treatments		\$44,880
4. Remove and replace 58 S.Y. of asphalt and base		\$2,320
Sub-total		\$67,200
30% Contingency		\$20,160
Total		\$87,360

* Prices does NOT include any utility relocation or interferences

The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "I"

SHEET: 4 OF 4

SCALE: 1"=100'

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NOTE:
REMOVE EXISTING INLETS AND
REPLACE WITH A NEW INLET. ATTACH
BOTH PROPOSED AND EXISTING PIPES
TO NEW INLETS

REMOVE AND REPLACE 45 S.Y. OF
ASPHALT AND BASE

REMOVE EXISTING 100 LF 24" RCP
AND INSTALL NEW 100 LF 36" RCP

11952

11950

REMOVE EXISTING 38 LF 24" RCP
AND INSTALL NEW 38 LF 36" RCP

11951

REMOVE EXISTING 297 LF 24" RCP
AND INSTALL NEW 297 LF 36" RCP

11954

REMOVE AND REPLACE 36 S.Y. OF
CONCRETE DRIVEWAY

12053

REMOVE AND REPLACE 65 S.Y. OF
ASPHALT AND BASE

REMOVE EXISTING 48 LF 24" RCP
AND INSTALL NEW 48 LF 30" RCP

REMOVE EXISTING 108 LF 24" RCP
AND INSTALL NEW 108 LF 36" RCP

11953

11955

11958

11959

11960

11961

11956

11957

LINDA ST.

CHARLES ST.

GRAPHIC SCALE



(IN FEET)

1 inch = 100 ft.

The City of St. Marys

PROPOSED ACTIVITY:

STORM WATER ANALYSIS

CLIENT:

THE CITY OF ST. MARYS

GROUP: "J"

DATE: JANUARY 2008

SHEET: 2 OF 3

LOCATION: ST. MARYS, GA

SCALE: 1"=100'



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ITEM QUANTITY & MATERIAL

ITEM	QUANTITY	MATERIAL	COST
1.	Demolition of existing 591 LF		\$10,000
	24" RCP and existing inlet structures		
2.	Installation of proposed 48 LF		\$8,860
	30" RCP, proposed inlet structure		
	and proposed pipe end treatments		
3.	Installation of proposed 543 LF		\$48,940
	36" RCP, proposed inlet structures		
	and proposed pipe end treatments		
4.	Remove and replace 110 S.Y. of		\$4,400
	asphalt and base		
5.	Remove and replace 36 S.Y. of		\$2,700
	concrete driveway		
6.	Attaching existing pipes to proposed		\$3,500
	inlet structures		

Sub-total

\$78,400

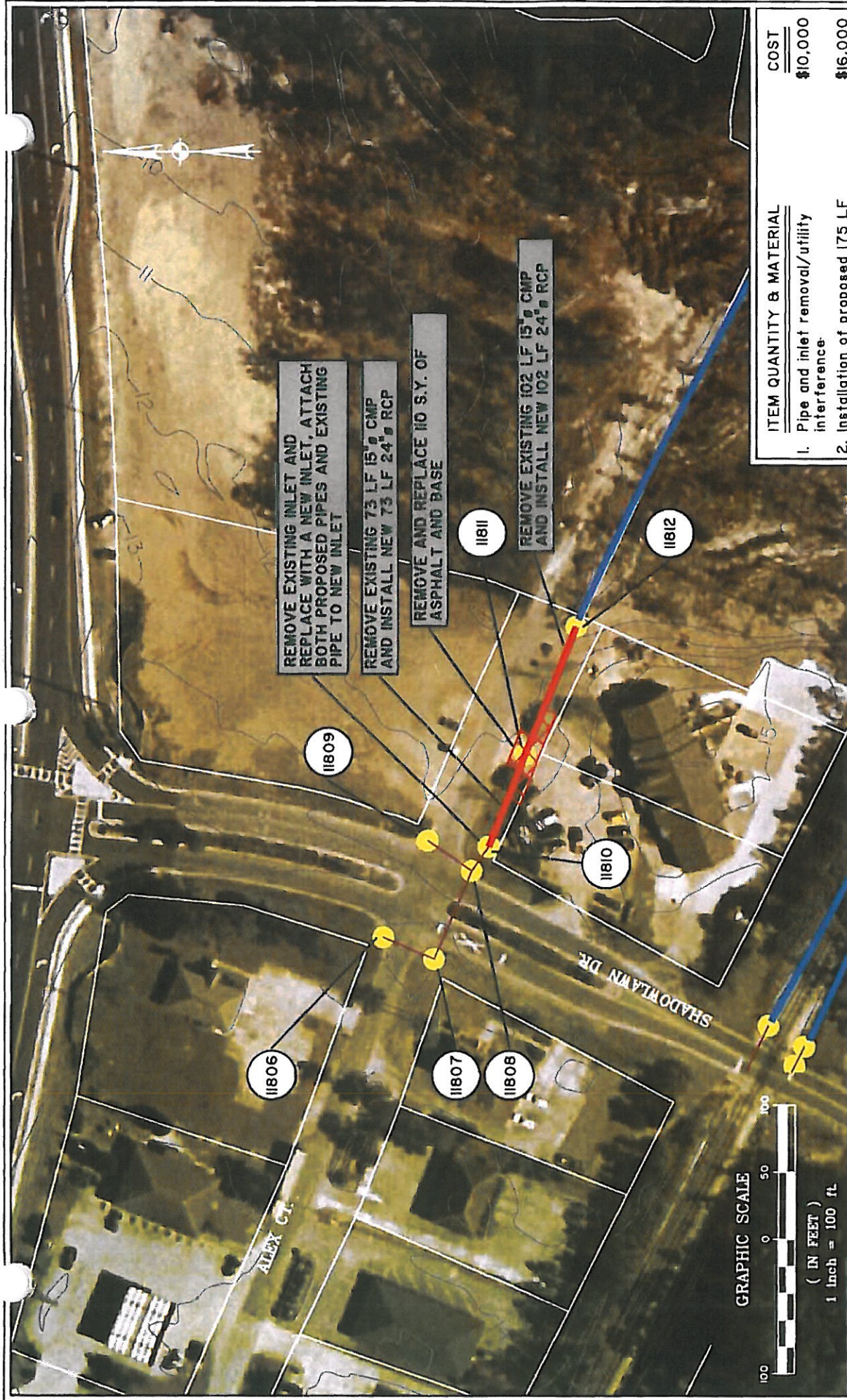
30% Contingency

\$23,520

Total

\$101,920

* Prices does NOT include any
utility relocation or interferences



GRAPHIC SCALE



(IN FEET)

1 inch = 100 ft

ITEM QUANTITY & MATERIAL

ITEM	QUANTITY	MATERIAL	COST
1. Pipe and inlet removal/utility interference.			\$10,000
2. Installation of proposed 175 LF 24\" RCP, proposed inlet structures and proposed pipe end treatments			\$16,000
3. Remove and replace 110 S.Y. of asphalt and base			\$4,400
4. Attaching existing pipe to proposed inlet structure			\$3,500
		Sub-total	\$33,900
		30% Contingency	\$10,170
		Total	\$44,070

* Prices does NOT include any utility relocation or interferences



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The City of St. Marys

PROPOSED ACTIVITY:

STORM WATER ANALYSIS

CLIENT:

THE CITY OF ST. MARYS

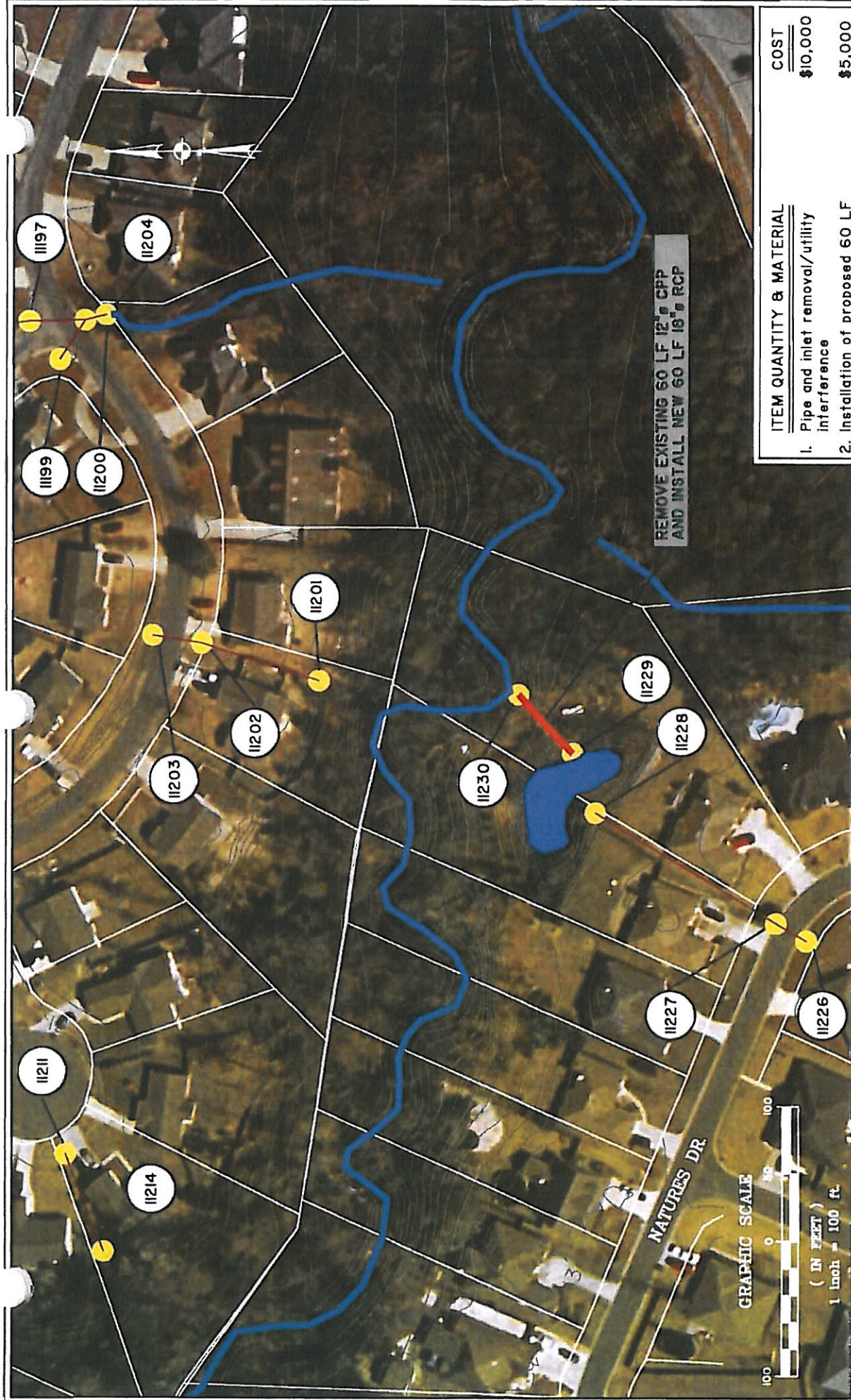
GROUP: "J"

DATE: JANUARY 2008

SHEET: 3 OF 3

LOCATION: ST. MARYS, GA

SCALE: 1"=100'



ITEM QUANTITY & MATERIAL		COST
1. Pipe and inlet removal/utility interference		\$10,000
2. Installation of proposed 60 LF 18" RCP and proposed pipe and treatments		\$5,000
Sub-total		\$15,000
30% Contingency		\$4,500
Total		\$19,500

* Prices does NOT include any utility relocation or interferences



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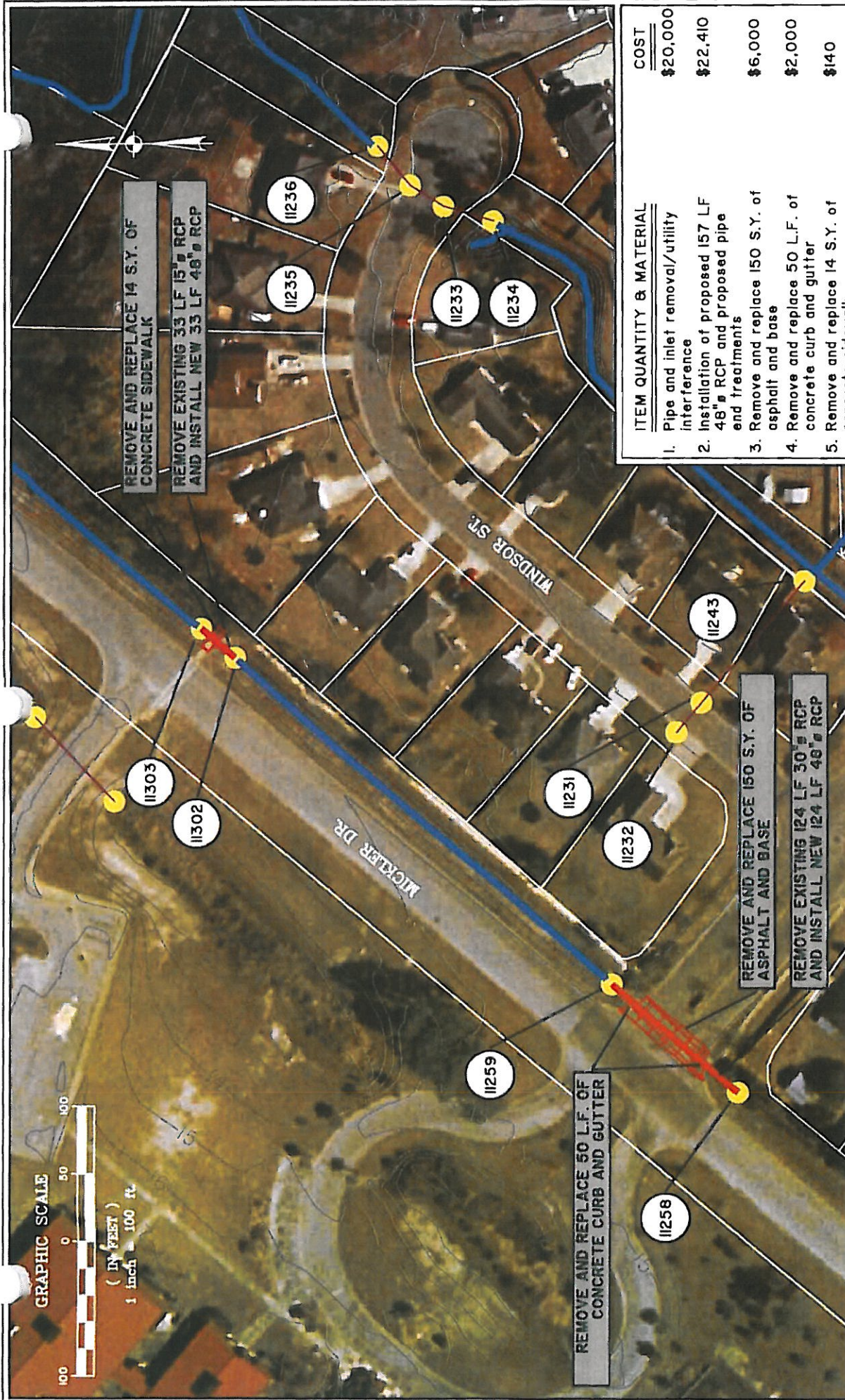
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The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

GROUP: "K"
SHEET: 2 OF 3
SCALE: 1"=100'



ITEM QUANTITY & MATERIAL

1. Pipe and inlet removal/utility interference
2. Installation of proposed 157 LF 48" RCP and proposed pipe end treatments
3. Remove and replace 150 S.Y. of asphalt and base
4. Remove and replace 50 L.F. of concrete curb and gutter
5. Remove and replace 14 S.Y. of concrete sidewalk

COST
\$20,000
\$22,410
\$6,000
\$2,000
\$140

Sub-total	\$50,550
30% Contingency	\$15,165
Total	\$65,715

* Prices does NOT include any utility relocation or interferences



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The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS
CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA
GROUP: "K"
SHEET: 3 OF 3
SCALE: 1"=100'



ITEM	QUANTITY & MATERIAL	COST
1.	Pipe and inlet removal/utility interference	\$10,000
2.	Installation of proposed 38 LF 12" RCP and proposed pipe and treatments	\$5,000
3.	Remove and replace 45 S.Y. of asphalt and base	\$1,800
4.	Remove and replace 12 S.Y. of concrete sidewalk	\$120
Sub-total		\$16,920
30% Contingency		\$5,076
Total		\$21,996

* Prices does NOT include any utility relocation or interferences



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The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

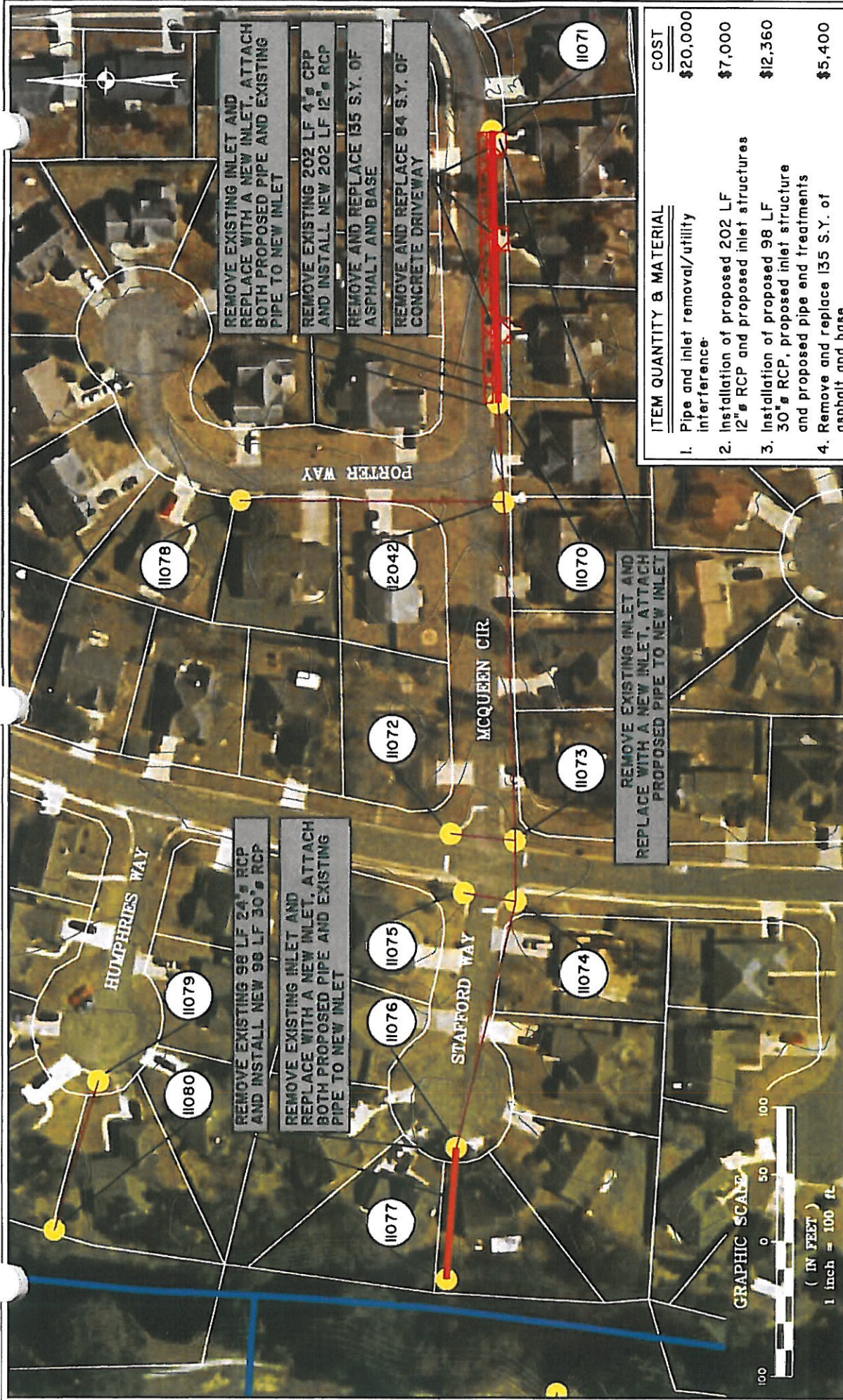
DATE: JANUARY 2008

LOCATION: ST. MARYS, GA

GROUP: "L"

SHEET: 2 OF 3

SCALE: 1"=100'



ITEM QUANTITY & MATERIAL

ITEM QUANTITY & MATERIAL	COST
1. Pipe and inlet removal/utility interference	\$20,000
2. Installation of proposed 202 LF 12" RCP and proposed inlet structures	\$7,000
3. Installation of proposed 98 LF 30" RCP, proposed inlet structure and proposed pipe end treatments	\$12,360
4. Remove and replace 135 S.Y. of asphalt and base	\$5,400
5. Remove and replace 84 S.Y. of concrete driveway	\$6,300
6. Attaching existing pipes to proposed inlet structures	\$3,500
Sub-total	\$54,560
30% Contingency	\$16,368
Total	\$70,928

* Prices does NOT include any utility relocation or interference



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The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS
CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA
GROUP: "L"
SHEET: 3 OF 3
SCALE: 1"=100'



The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

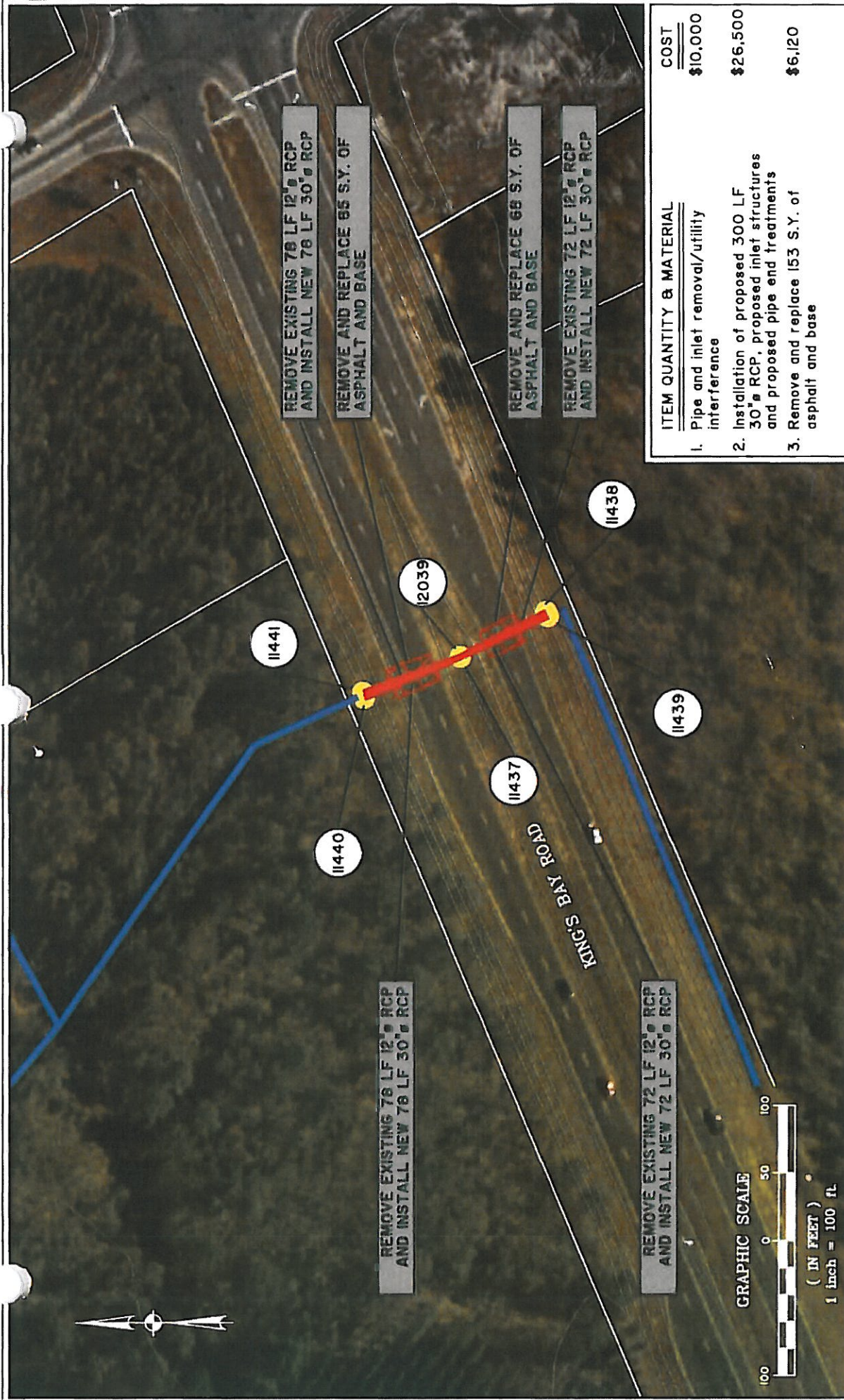
GROUP: "M"
SHEET: 1 OF 3
SCALE: 1"= 300'



THOMAS & HUTTON ENGINEERING CO.

50 PARK OF COMMERCE WAY
POST OFFICE BOX 2727
SAVANNAH, GA. 31402-2727 (912)234-5300

BRUNSWICK, GA • CHARLESTON, SC
MYRTLE BEACH, SC • WILMINGTON, NC



ITEM QUANTITY & MATERIAL		COST
1. Pipe and inlet removal/utility interference		\$10,000
2. Installation of proposed 300 LF 30" RCP, proposed inlet structures and proposed pipe end treatments		\$26,500
3. Remove and replace 153 S.Y. of asphalt and base		\$6,120
Sub-total		\$42,620
30% Contingency		\$12,786
Total		\$55,406

* Prices does NOT include any utility relocation or interferences



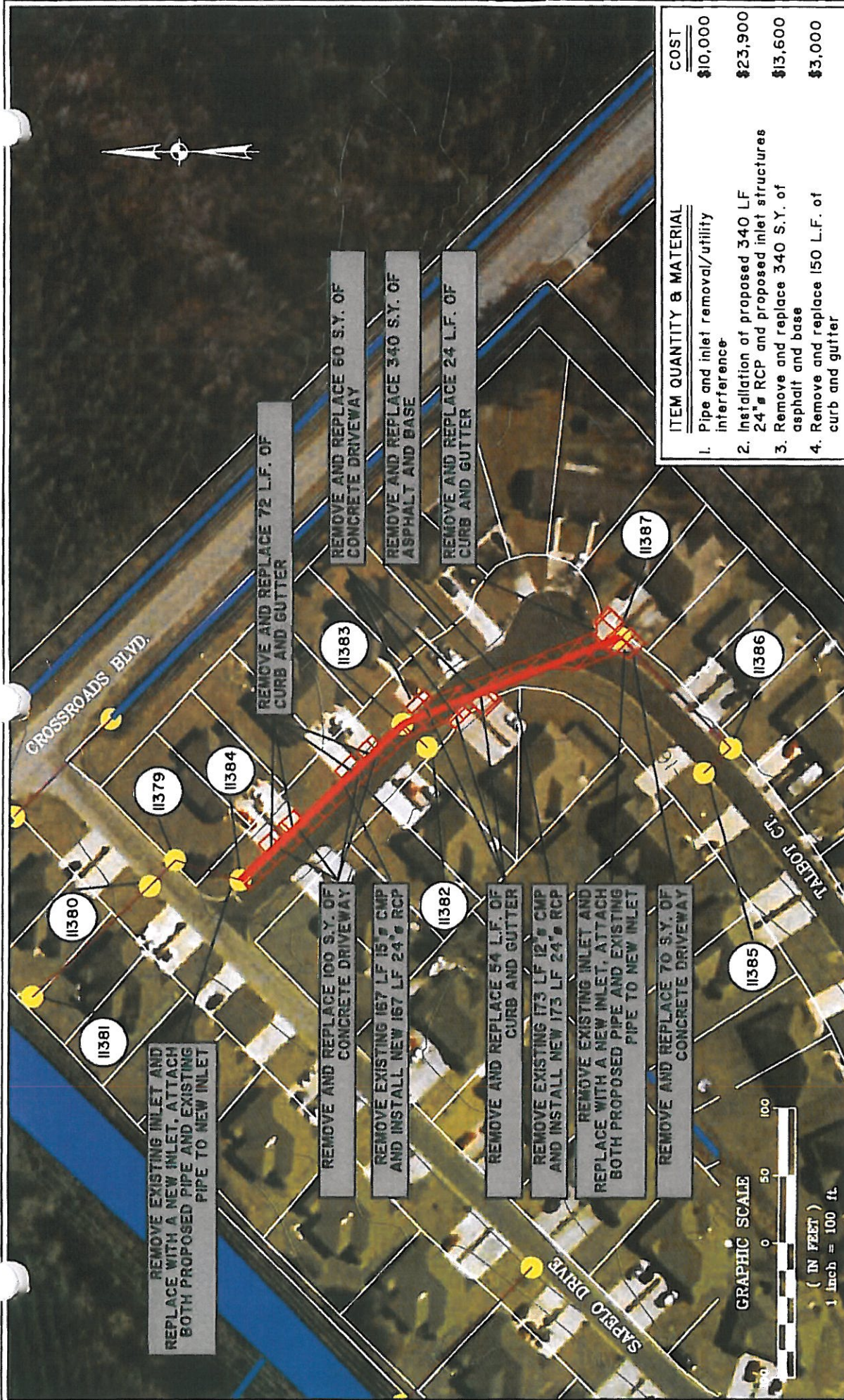
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The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA
GROUP: "M"
SHEET: 2 OF 3
SCALE: 1"=100'



ITEM	QUANTITY & MATERIAL	COST
1.	Pipe and inlet removal/utility interference	\$10,000
2.	Installation of proposed 340 LF 24" RCP and proposed inlet structures	\$23,900
3.	Remove and replace 340 S.Y. of asphalt and base	\$13,600
4.	Remove and replace 150 L.F. of curb and gutter	\$3,000
5.	Remove and replace 230 L.F. of curb and gutter	\$4,600
6.	Attaching existing pipes to proposed inlet structures	\$3,500
Sub-total		\$58,600
30% Contingency		\$17,580
Total		\$76,180

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The City of St. Marys
PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

GROUP: "M"
SHEET: 3 OF 3
SCALE: 1"=100'



The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

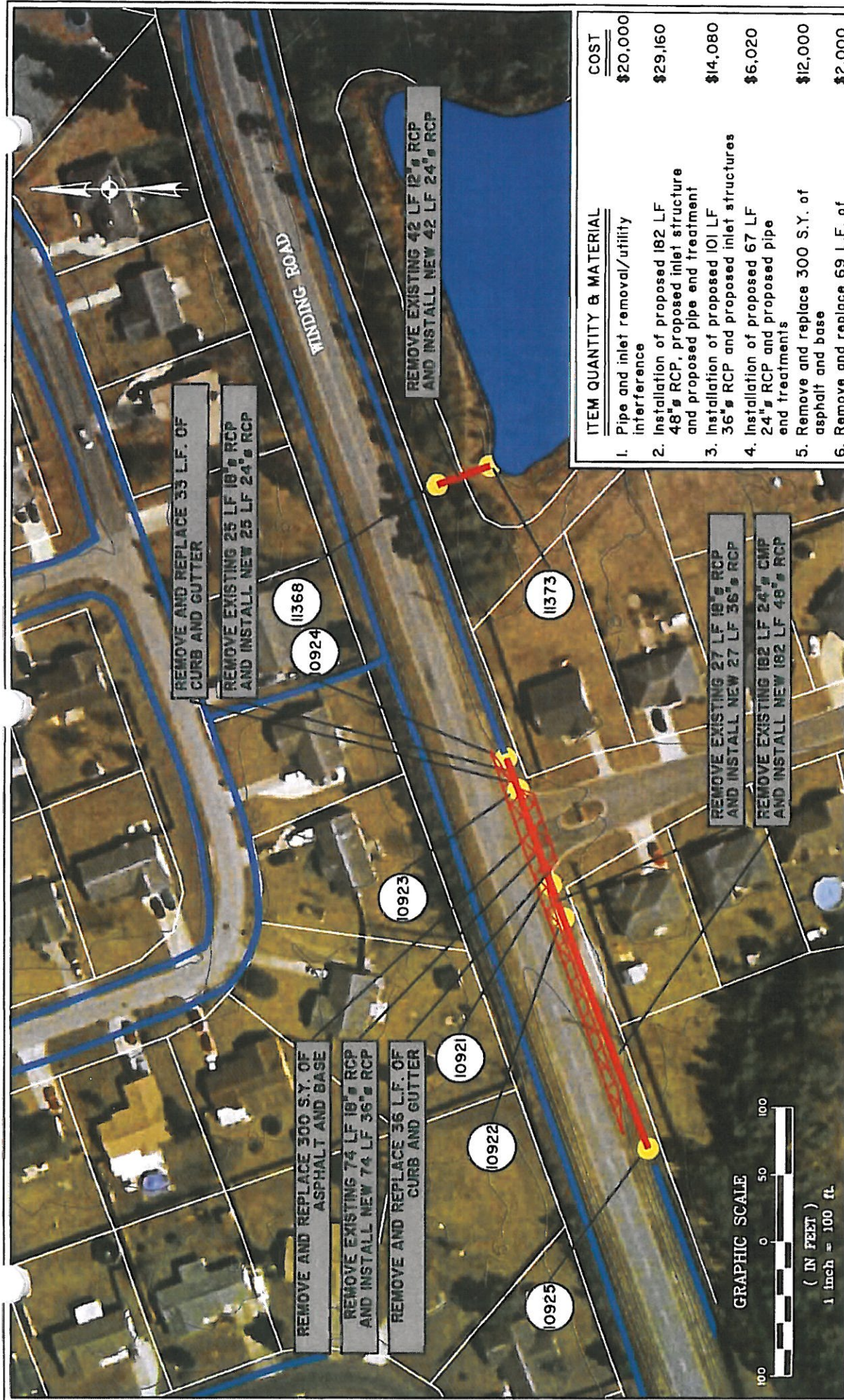
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SHEET: 1 OF 3
SCALE: 1"= 300'



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ITEM	QUANTITY & MATERIAL	COST
1.	Pipe and inlet removal/utility interference	\$20,000
2.	Installation of proposed 182 LF 48" RCP, proposed inlet structure and proposed pipe and treatment	\$29,160
3.	Installation of proposed 101 LF 36" RCP and proposed inlet structures	\$14,080
4.	Installation of proposed 67 LF 24" RCP and proposed pipe and treatments	\$6,020
5.	Remove and replace 300 S.Y. of asphalt and base	\$12,000
6.	Remove and replace 69 L.F. of asphalt and base	\$2,000

Sub-total	\$83,260
30% Contingency	\$24,978
Total	\$108,238

* Prices does NOT include any utility relocation or interferences



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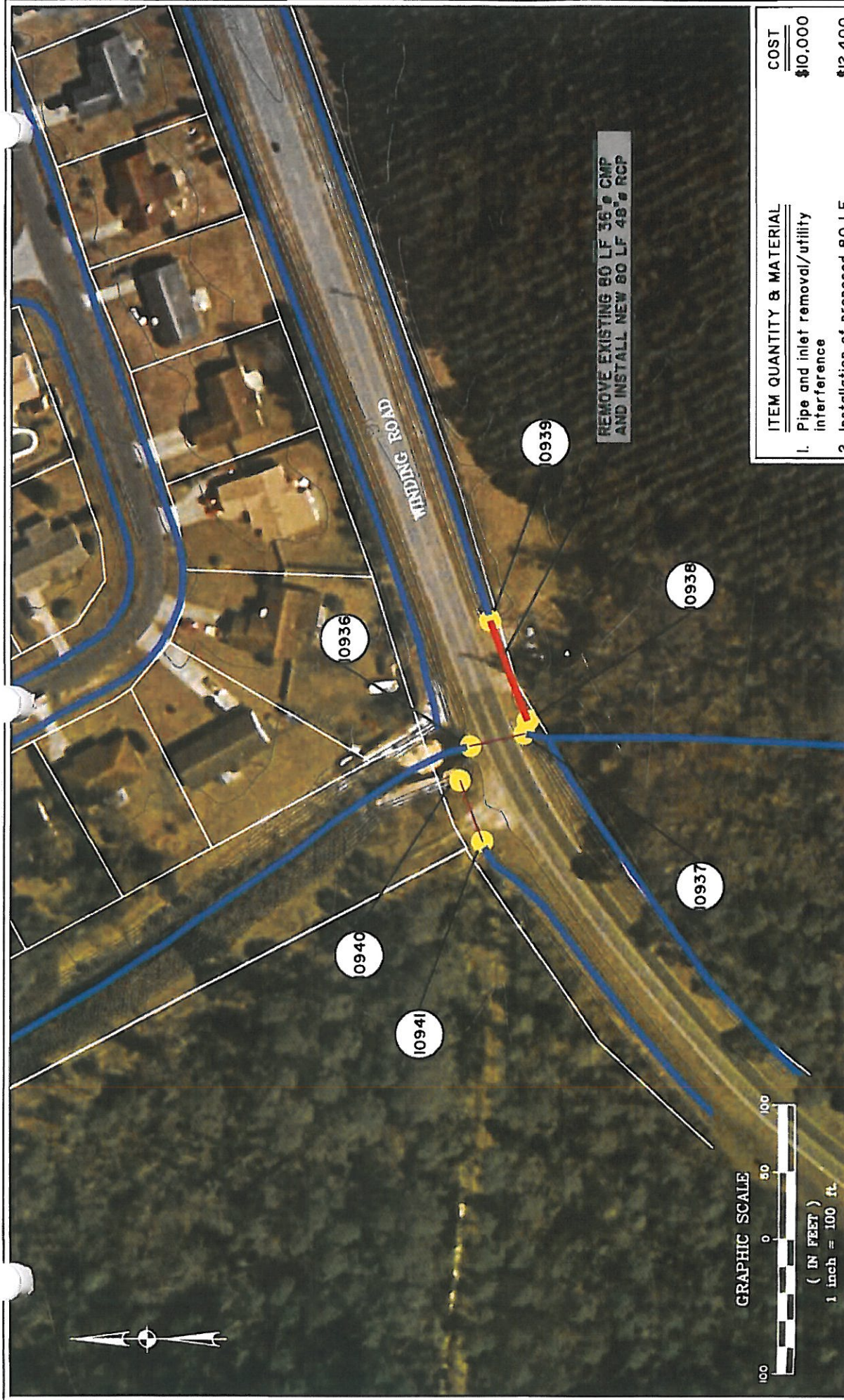
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The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS
DATE: JANUARY 2008
LOCATION: ST. MARYS, GA
GROUP: "N"
SHEET: 2 OF 3
SCALE: 1"=100'



ITEM QUANTITY & MATERIAL		COST
1.	Pipe and inlet removal/utility interference	\$10,000
2.	Installation of proposed 80 LF 48" RCP and proposed pipe end treatments	\$12,400
Sub-total		\$22,400
30% Contingency		\$6,720
Total		\$29,120

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STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

GROUP: "N"
SHEET: 3 OF 3
SCALE: 1"=100'



The City of St. Marys

PROPOSED ACTIVITY:
STORM WATER ANALYSIS

CLIENT:
THE CITY OF ST. MARYS

DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

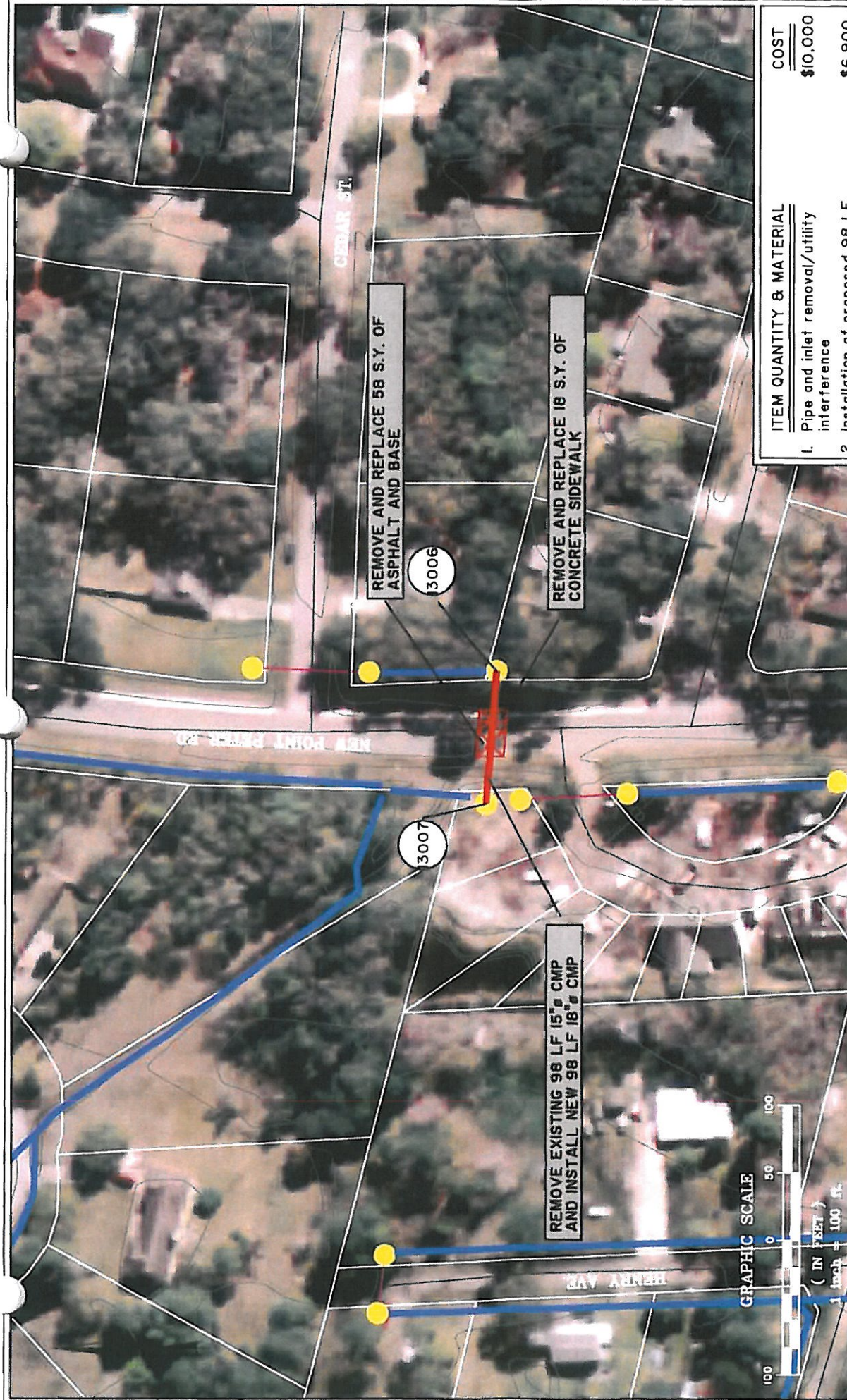
GROUP: "0"
SHEET: 1 OF 3
SCALE: 1"= 300'



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ITEM QUANTITY & MATERIAL		COST
1.	Pipe and inlet removal/utility interference	\$10,000
2.	Installation of proposed 98 LF 18" CMP and proposed pipe end treatments	\$6,900
3.	Remove and replace 58 S.Y. of asphalt and base	\$2,320
3.	Remove and replace 18 S.Y. of concrete sidewalk	\$180
Sub-total		\$19,400
30% Contingency		\$5,820
Total		\$25,220

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DATE: JANUARY 2008
LOCATION: ST. MARYS, GA

GROUP: "O"
SHEET: 3 OF 3
SCALE: 1"=100'



CAMDEN COUNTY, GEORGIA

CITY OF ST. MARYS

PREPARED BY:



GEORGIA - SAVANNAH, BRUNSWICK
SOUTH CAROLINA - CHARLESTON, MYRTLE BEACH
NORTH CAROLINA - MOUNTAIN VIEW



Q. 2. *What is the significance of the fact that the first two chapters of the book are devoted to the study of the history of the book?*

