COUNTY AGENDA REQUEST

Department:	Administration	Presenter(s):	Chairman Steve Brown
Meeting Date:	Thursday, August 29, 2013	Type of Request:	Public Hearing

Wording for the Agenda:

Public Hearing on the proposed Core Infrastructure Special Purpose Local Option Sales Tax (SPLOST) project list.

Background/History/Details:

Fayette County owns or maintains miles of storm drainage pipe and associated drainage infrastructure for managing stormwater runoff. This is comprehensively referred to as the Municipal Separate Storm Sewer System (MS4), and it includes items such as: storm drainage pipes; box culverts; gutters; ditches, swales, catch basins and inlets. A portion of the County's MS4 is in need of repairs repairs or replacements due to deterioration of corrugated metal pipe that is approaching or exceeding its expected useful life. Deteriorated, damaged, poorly maintained, and/or undersized pipes and structures can result in potentially serious safety, infrastructure, flooding and environmental problems. The drainage system improvements identified in the supporting material provides repair and replacement of drainage systems under and adjacent to roadways that have deteriorated to the point where they no longer function as intended.

The proposed Core Infrastructure Special Purpose Local Option Sales Tax (SPLOST) project list is divided into four categories: Categories I-IV. Category I Projects (located in pages 13-30) concern replacement or rehabilitation of Stormwater Drainage Systems where operational failure may result in loss of property or probable loss of human life. Category II Projects, which cost more than $20,000 each, are divided into Tier 1 projects and Tier 2 projects. Category II- Tier 1 Projects (located in pages 31-97) need immediate attention. Category II- Tier 2 Projects (pages 98-208) need to be replaced soon. Category III Projects (located in pages 209-212) cost less than $20,000. Category IV Projects (located in pages 213-216) provide stormwater drainage systems functional improvements.

What action are you seeking from the Board of Commissioners?

No Board action is requested at this time.

If this item requires funding, please describe:

Not Applicable.

Has this request been considered within the past two years?	No	If so, when?	
Is Audio-Visual Equipment Required for this Request?*	No	Backup Provided with Request?	Yes

**** All audio-visual material must be submitted to the County Clerk's Office no later than 48 hours prior to the meeting. It is also your department's responsibility to ensure all third-party audio-visual material is submitted at least 48 hours in advance.***

Approved by Finance	Not Applicable	Reviewed by Legal	
Approved by Purchasing	Not Applicable	County Clerk's Approval	Yes
Administrator's Approval			

Staff Notes:

The Board of Commissioners will meet in a Special Called Meeting on Thursday, September 5, 2013 to consider adoption of an Intergovernmental Agreement for the Use and Distribution of Proceeds from the 2013 Special Purpose Local Option Sales Tax for Capital Outlay Projects, and to consider adopting a resolution to call a referendum to seek authorization to place this SPLOST issue on the November 2013 ballot.

Contact: **County Clerk Floyd Jones**
Phone: **770-305-5102**
Email: **fjones@fayettecountyga.gov**

FOR IMMEDIATE RELEASE:

Fayette County Answers Questions Related to the Core Infrastructure SPLOST

Fayette County, Georgia, July 26, 2013 – In a continued effort to address any questions or concerns that Fayette residents have regarding the Core Infrastructure SPLOST, the Fayette County Board of Commissioners has requested that all questions and subsequent answers be given to the news media.

The county government has created a special email address for citizens to ask questions or express opinions on the Core Infrastructure SPLOST. Citizens can communicate with the county staff on projects at stormwaterinput@fayettecountyga.gov.

The county will have a final public hearing on their final stormwater project recommendations at the Board of Commissioners' meeting on August 29. The list of projects is available on the county web site at www.fayettecountyga.gov.

Questions and comments will be accepted up to the date of the actual vote on the Core Infrastructure SPLOST referendum.

Please see the questions given to date.

QUESTIONS AND ANSWERS

Fayette County Draft Core Infrastructure SPLOST 2013
Draft for Public Comment

Environmental Management and Public Works departments have received questions concerning the Draft Core Infrastructure SPLOST 2013 list released by Fayette County. Below are answers to questions we have received to date. Environmental Management will continue to update our SPLOST Question with Answer link on the Fayette County web site as we receive new questions.

1. Does the county have a Stormwater Master Plan?

   Fayette County's stormwater planning is on-going and the Stormwater Master Plan continues to be developed and refined. Planning-level conceptual analyses for each project proposed incorporates future-flood condition models to evaluate upstream and downstream impacts; along with the county's street design standards and specifications; county and state safe dams rules; and sound engineering practices.

2. How can you propose projects without knowing the upstream and downstream impacts of the proposed replacements?

   The county hired Jacobs Engineering, a third-party engineering firm specializing in stormwater construction design and Category I and II projects include design costs using environmental, hydrologic and hydraulic analyses appropriate for culvert repairs, replacements and upgrades to prohibit negative impacts to upstream and downstream properties.

   Category II projects' analysis provides adequate passage of stormwater from large rain events (a 100-year storm for major roads and a 25-year storm event for local roads) and provides energy dissipation to alleviate downstream erosion. Where over 100 acres drain to the stormwater pipe, floodplain modeling will be utilized to assess watershed impacts. For drainage basins less than 100

acres, standard hydrology was and will be further utilized to determine the effects of the system on the watershed.

We will constantly review all elements within the watershed to evaluate any changes needing to be made to the overall project list.

3. Why is the county proposing to replace a number of stormwater pipes that seem to be functioning correctly?

The condition of pipes identified in the project list varies significantly. Not all projects are cited for immediate replacement with the implementation ranging from urgent to five years out. A project was included on the list if it met one or more of the following "warrants":

- **The pipe is in poor condition and requires replacement in the near future to avoid damage to county infrastructure;**
- **The pipe is undersized and contributes to localized flooding issues;**
- **The pipe is too short and presents a safety issue to vehicles in terms of a steep drop-off;**
- **The pipe is corrugated metal pipe, under a collector or arterial and on a stream and is exhibiting signs of exterior and/or structural deterioration; and/or,**
- **The pipe is in "fair" condition today but structural deterioration has been documented.**

4. Is consideration given to other options for pipe stabilization or reconditioning?

Yes. Over the past few years county staff has compared costs of (and implemented a pilot study) alternatives to pipe replacement including: slip-line products, alternative materials to reinforced concrete pipe, and concrete-spinning.

Slip lining a pipe with steel casing and concrete-spinning, for example, can be as expensive as replacing the same pipe with concrete. The advantage to slip lining with steel casing and concrete-spinning is you can perform the work without shutting down the road.

Concrete spinning for smaller diameter pipes works well in cases where pipe installation is well below road grade and cost of constructing a temporary road in a one-way-in one-way out subdivision is triple the costs of the actual pipe replacement.

Reinforced concrete pipe under roadways often offers the best combination of longevity, cost, low risk and water quality enhancement, the project list allows for the consideration of other options to repair, enhance or replace the drainage system.

5. What is the priority of project installation?

Projects of similar nature/scope/cost are organized by Categories:

Category I projects are the top priority where construction needs to start immediately to prevent the possibility of loss of human life and/or property.

Category II, Tier I projects are the second priority where the repair need is "immediate" due to significant deterioration impairing its ability to function.
These projects will be implemented within two years.

Category II Tier 2 and Category III projects are projects planned to be implemented within the next 3-5 years.

6. Why does the list not include <u>specific designs</u> for each project?

Category I and II projects include the necessary design specifics about project replacements to give accurate cost estimates for each project implementation. The county hired Jacobs Engineering, a third-party engineering firm specializing in stormwater construction design, to provide accurate estimates based on their own data analysis. Costs for specific design plan preparation are included in each cost estimate for Category I and II projects.

Category III projects were developed in-house using management estimates and costs of previously completed stormwater projects. The cost did not outweigh the benefit for performing detail design work before the county knows if the Core Infrastructure SPLOST funds will be approved.

7. Why do some projects listed would require the county to work outside the county's right of way on private property?

   The current Fayette County extent-of-service includes the ability for Fayette County to conduct work within drainage easements through the use of right-of-entry agreements and other legal instruments. Work outside the right-of-way is typically restricted to situations in which it is needed in order to provide an appropriate "fix" to the problem.

8. Why is the county proposing to perform work on dams?

   The county is responsible for three (3) dams included in the project list and each of them is under the jurisdiction of the Georgia Safe Dams Program because these dams meet their definition.

   - **Emerald Lake Dam is within county right-of-way and the county accepted ownership and maintenance responsibility for this structure in 1998 and this project brings the dam into compliance with the state's Safe Dams Program' Category I standards.**
   - **Kozisek Dam is a Category I structure with some of its components dependent upon or integral with Neely Road. Fayette County is in on-going negotiations with the property owner and the Safe Dams Program to absolve Fayette County of all ownership and maintenance responsibility of the structure. The cost estimate in the Project List reflects the county's pro-rated share associated with dam removal and road reconstruction. Fayette County is responsible to safely pass the flows associated with the perennial stream under the road, and the cost to do so is reflected in the estimate.**

   - **Longview Dam (AKA Margaret Phillips Lake Dam) is a Category I structure within the right-of-way of Longview Road. Similar to Emerald Lake Dam, and this project brings the dam into compliance with the state's Safe Dams Program' Category I standards. Repairing the dam is contingent upon the upstream lake being deeded to Fayette County for use as a passive park and/or environmentally protected area.**

9. I thought the Core Infrastructure SPLOST portion originally proposed was around $20 million dollars. The published list is for $16.8. What becomes of the overpayment?"

   Fayette County's share of the SPLOST revenue, as promised, will only be for the $16.8 million dollars of projects listed. Funds beyond that amount will be reallocated to the cities to aid them in completing their projects on their core infrastructure project lists.

10. Under Category IV, equipment and professional services are listed. Why is the county proposing to purchase new equipment when they could use existing road department equipment? What will "professional services" monies be used for?

    The equipment will enhance our productivity and our efficiency. The project list includes the purchase of five pieces of equipment that would extend Public Work's existing special use equipment capabilities:

    Vac-Con Jet Trailer pulled by a Crew Cab pick-up truck - designed specifically to remove mud, leaves, gravel and other debris from manholes, catch basins, culverts and similar structures of any size. Without this equipment the work is slow, labor intensive, and very limited in its ability to achieve getting the system to properly function.

    Dump truck, trailer and mini excavator - equipment used for small pipe replacement and minor grading work in which the county's other equipment is too large for effective use.

11. What's the implementation approach? How will the differing departments work together?

    Although specific roles and responsibilities may change over time, this is a summary of key responsibilities by department for implementing the listed Core Infrastructure SPLOST projects:

    ***Engineering Department* – develops project from concept through final design (some in-house or third-party engineers) with help from Environmental Management; coordinates utilities; manages permitting, right-of-way, and traffic control issues; provide updated cost estimates; and work with Purchasing Department on procurement of professional services, materials and rental equipment.**

Road Department **– performs in-house field work/construction on select projects using county labor; primarily responsible for project and construction oversight; existing equipment will be used when available and feasible.**

Environmental Management **– responsible for overall stormwater program management; coordinates with citizens on progress; defines Stormwater Extent of Service and Level of Service; establishes minimum design standards; prioritize project development in conjunction with resources and available funding; develops concepts; and has final approval authority on design and acceptance of field work.**

Consultants – third-party contractors will be used for projects that are beyond the Road Department's capabilities or for scheduling reasons. Coordination among all three Departments will be on-going to optimize project schedules and evaluate alternatives, cost estimates, bids, proposals, etc.

If the Core Infrastructure SPLOST referendum passes in November, residents in the unincorporated county will not have to pay annual stormwater fees for the following four years. The collection of the tax would end once the budgeted funds are collected or at the close of the second year whichever comes first.

Hard copies of the county's 181 stormwater projects on the Core Infrastructure SPLOST list are available for review at the Fayette County's administration building in suite 100 and the Fayette library, Peachtree City's library and City Hall, Fayetteville's City Hall and Tyrone's library and Town Hall.

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Please see the questions given to date.

QUESTIONS AND ANSWERS

Fayette County Draft Core Infrastructure SPLOST 2013
Draft for Public Comment

Below are answers to questions we have received to date. The County will continue to update its SPLOST Question with Answer link on the Fayette County web site as we receive new questions.

Why does the SPLOST list contain culvert projects to be replaced with bridges?

Based on stormwater maintenance issues associated with multiple box culverts, the county decided to replace existing culverts with bridges since the bridge replacement costs are comparable to culvert replacement costs for these large culverts.

Is there a more current version of the county's National Pollutant Discharge Elimination System (NPDES) permit?

As required by the new, 2012 state NPDES permit, Fayette County submitted its Stormwater Management Program Plan this month. It is currently being reviewed for approval by the state. As soon as the county receives approval, staff will post the permit on the county website.

How will the functions and activities called for in the Stormwater Management Program Plan **be funded?**

Compliance activities associated with the Stormwater Management Program Plan will be funded though the general fund.

Where will the $500,000 in Category IV under "Utility Reimbursement" go?

This money will reimburse the General Fund for stormwater pipe replacement budgeted in 2014.

How do I obtain a copy of the engineering and cost estimates related to the Dam Projects?

Cost estimates for both Emerald Lake Dam and Longview Dam are currently available for download on the county's website.

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FAYETTE COUNTY CORE INFRASTRUCTURE IMPROVEMENTS
DRAFT FOR PUBLIC REVIEW AND COMMENT

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1. Project Summary

2. Category I

3. Category II
   Tier 1
   Tier 2

4. Category III

5. Category IV

FAYETTE COUNTY CORE INFRASTRUCTURE IMPROVEMENTS
DRAFT FOR PUBLIC REVIEW AND COMMENT

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The drainage system improvements identified provides repair and replacement of drainage systems under and adjacent to roadways that have deteriorated to the point where they no longer function as intended.

Category I **TOTAL** **$2,908,888.55**

Flooding and Safety: Replacement or rehabilitation of Stormwater Drainage Systems where failure or improper operation may result in loss of property or probable loss of human life. This includes Category I dams as classified by the state within Fayette County right-of-way. All projects listed in this category are in need of immediate attention.

Category II **TOTAL** **$11,598,503.97**

Stormwater Infrastructure Preservation Projects Greater than $20,000: Deformation or damage of system may affect the drainage capacity or overall function of the structure. These projects have been subcategorized into Tier 1 and Tier 2.

Tier 1 projects are in need of immediate attention.	**$3,643,359.79**
Tier 2 projects are projects that need replacement soon.	**$7,955,144.18**

Category III **TOTAL** **$912,199.62**

Stormwater Infrastructure Preservation Projects Less than $20,000: Deformation or damage of system may affect the drainage capacity or overall function of the structure.

Category IV **TOTAL** **$1,382,500.00**

Stormwater Improvement Projects: Stormwater drainage systems functional improvements.

CORE INFRASTRUCTURE SPLOST 2013 ***TOTAL*** ***$16,802,091.13***

FAYETTE COUNTY CORE INFRASTRUCTURE IMPROVEMENTS
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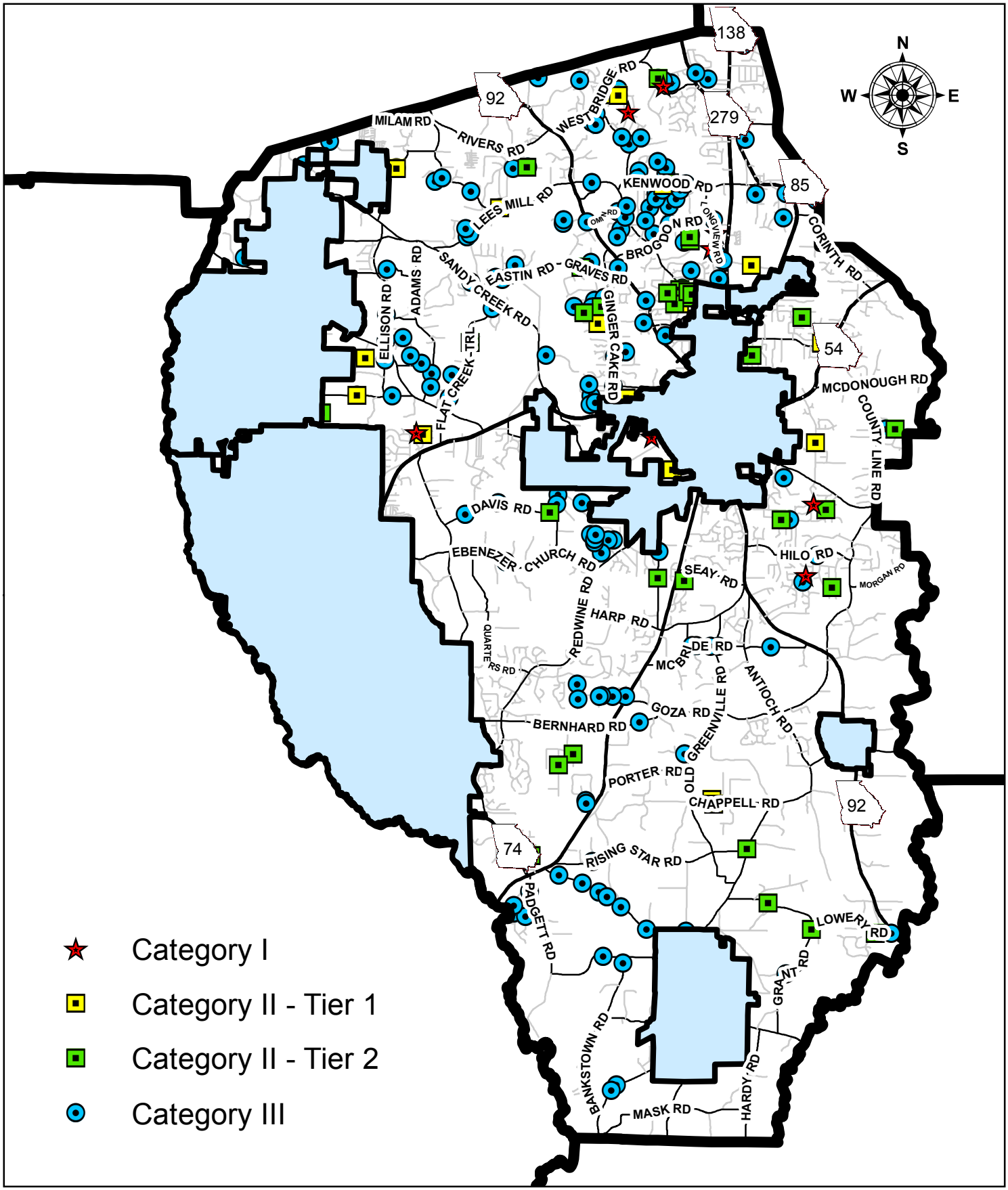


CORE INFRASTRUCTURE SPLOST 2013

Draft for Public Comment

Jacobs General Assumptions

1 Utility locations are based on visual inspection of the above ground features. No research, SUE equipment or contact with utility owners was conducted. The utility relocation costs are based on common sizes for each type of utility.

2 ROW estimates are based on cursory search of residential properties in Fayette County. A conservative average value of $4/sf was used, which accounts for potential market appreciation over the life of a SPLOST program and the conceptual/planning level of the estimates. Full property appraisal of specific locations will be required once detailed plans are available. The estimated right of way cost was established by estimating the additional right of way or easement area(s) needed to construct the drainage and roadway improvements.

3 The Fayette County Development Regulations, Article III, Street Design Standards and Specifications were utilized to determine the minimum pavement design, design speed, and other design criteria needed to prepare the subject cost estimate.

4 The Fayette County Thoroughfare Plan was utilized to determine the street classification for the subject project.

5 GDOT Item Mean Summary information (as of June 6, 2013) was used to estimate item unit cost values. The unit costs were increased by 20% to account for the small project size, shortened construction time related to detour limitations and general differences between State and City/County level projects .

6 Traffic Control and Staging Cost Percentage(s) are based on the street classification, roadway closure possibility, and the need for public information/involvement during construction.

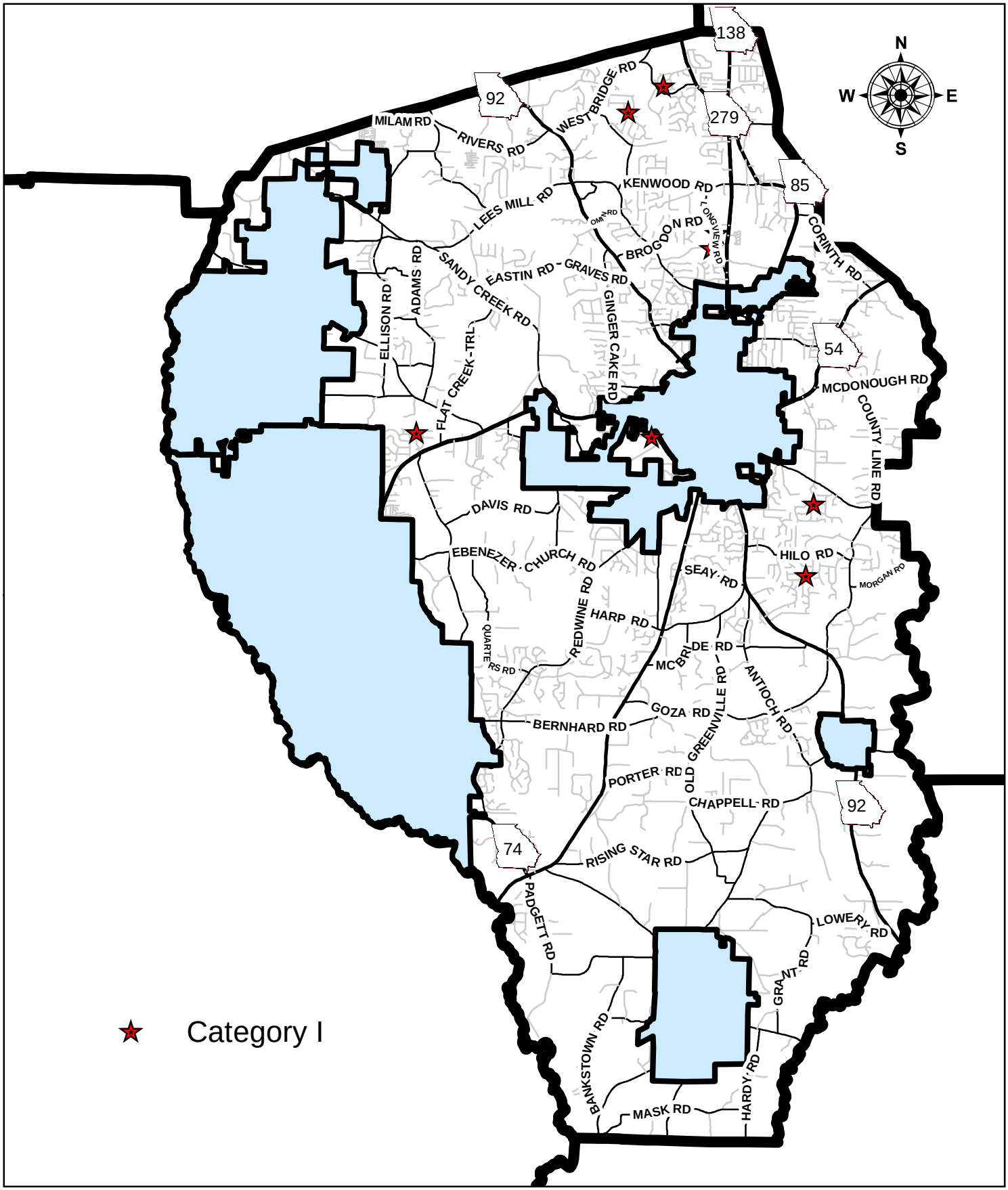
7 Design cost was estimated based on construction cost for larger projects (assumed 10%). For projects with construction cost less than $150,000, a minimum design cost of $15,000 was used. The design cost includes engineering design and survey efforts.

8 Environmental efforts are anticipated to be minimal due to the nature of the projects (perpendicular crossing/maintenance project classification) and include wetland delineation, compliance with state stream buffers, and minimal permitting . Unless otherwise noted, projects are assumed to be exempt from Georgia EPD stream buffer variances on the basis of a drainage structure exemption. In addition, projects are assumed to fall under a Nationwide Permit 3A (Maintenance Activity). Ecological investigation was not completed for this effort and will be required at the time of project to assess actual environmental impacts and costs.

It is assumed that floodplain modeling will be required for all crossings in FEMA-designated Zone AE (floodway) and Zone A special flood hazard areas, but that the crossing will be designed to comply with FEMA requirements for no-rise. No map revision submittals to FEMA are included in the cost estimates. The FEMA studies are included in the environmental cost for each project to which this is anticipated to be required.

Levels of Environmental Analysis/Permitting:
$10,000: minimal environmental efforts described above
$15,000: minimal environmental, FEMA Zone A study required, culvert
$18,000: minimal environmental, FEMA Zone AE study required, culvert
$20,000: minimal environmental, FEMA Zone A/AE study required, bridge

9 Pipe condition assessment categories:
5: Severe structural damage; > 10% loss of flow area; function of structure compromised and failure imminent
4: Significant signs of exterior and structural deterioration; some loss of flow area
3: Signs of exterior deterioration but structurally functioning
2: Minor signs of deterioration; primary flow area in tact and functioning
1: System performing as designed and in good condition



CORE INFRASTRUCTURE SPLOST 2013

Draft for Public Comment

CATEGORY I

Project ID	Project Name	Project Description	Cost
	Brittany Way	6'x4' RBC, 60', system evaluation	$57,424.08
	Covered Bridge Trl	Ditch rehab/plunge pool armoring; pipe upsizing	$25,000.00
	Emerald Lake Dam[1]	Category I Dam. The structure does not currently meet State safety standards and is a threat to downstream properties.	$1,108,650.00
	Kozisek Dam[1]	Category I Dam. The structure does not currently meet State safety standards and is a threat to downstream properties.	$250,000.00
	Lawson Ln	Undersized pipes in Northridge Subdivision results in flooding of road, lots and several homes along Lawson Lane. Project would replace existing pipe and add additional drainage structures.	$51,661.00
	Longview Dam[1]	Category I Dam. The structure does not currently meet State safety standards and is a threat to downstream properties.	$1,212,647.00
	Merrydale Dr	500' stream restoration, floodplain storage	$125,000.00
	Oak St	3'x2' RBC, 80'	$78,506.47
		TOTAL :	**$2,908,888.55**

[1]Detailed cost estimated to be added upon receipt from engineering firm.

General Information	
Project ID	
Street Name	**Brittany Way**
Site Visit Date	6/11/2013
Road Classification	Internal Local

Project Notes

Neighborhood drainage system evaluation and replacement. Rural typical section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 12'
Existing Shld Width (paved and grass) (feet)	4' (Grass)
Existing Side Slopes	flat
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	4
Pipe Type and Size	30", 150'
Pipe Condition (1-5) (1 is new)	4 (Installation)

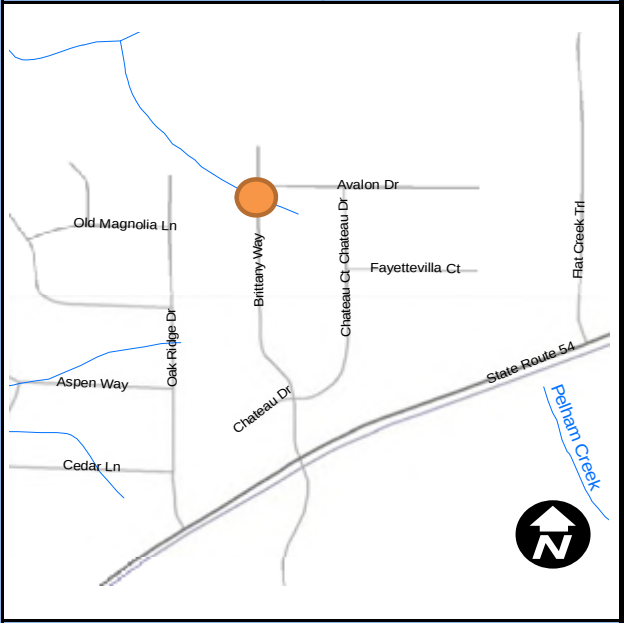
Condition Notes: Downstream pipe is too long to collect area drainage creating wet conditions between headwall and road

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	X

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	None
Water	X
Sewer	None
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	6' x 4' box, concrete, 60' length
Utility Relocations	Water
Guardrail Replacement	
Miscellaneous Features	Daylighting ~ 90' stream upstream of road to allow local drainage to enter culvert.
	Assumed hydraulic analysis of existing system

Planning Cost Estimate

Type	Notes	Total
System Evaluation		$5,000.00
Design		$2,993.10
Right of Way Cost		$4,000.00
Utility Relocation Cost		$5,500.00
Construction Cost		$29,930.98
Environmental Permits		$10,000.00
	Total Planning Estimate	**$57,424.08**

JACOBS

Photo 1:

Photo 2:

Brittany Way

Photo Date:
5/21/21013
Taken By:
David King
Page:
1

Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,809.19
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 1,809.19
Grading Complete (5% of Rwy Items & Drng Total $)			$ 789.69
Roadway Total			**$ 2,598.89**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	17	$ 11,933.87
Steel (lb)		$ 1.38	1227.5	$ 1,687.81
Type 2 Back Fill (cy)		$ 60.50	6	$ 363.00
Drainage Total				**$ 13,984.69**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.1	$ 41.80
Silt Fence (LF)	$ 5.50	200	$ 1,100.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	50	$ 137.50
Mulch (TN)	$ 286.00	1.5	$ 429.00
Sod (SY)	$ 9.90	300	$ 2,970.00
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00	0	$ -
Erosion Control Total			**$ 6,130.30**
Construction Cost Total			**$ 27,713.87**
Traffic Control (8% of Construction Total $)			**$ 2,217.11**
Construction Cost Grand Total			**$ 29,930.98**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 5,500.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	2000	$ 4,000.00
ROW Total			**$ 4,000.00**

General Information	
Project ID	
Location	**Covered Bridge Trl**
Site Visit Date	6/11/13

Project Notes

Single Property

Field Notes

Outlet for neighborhood stormwater system has severely eroded drainage ditch to stream; headwall of outlet has fallen off and there is a 10'+ plunge

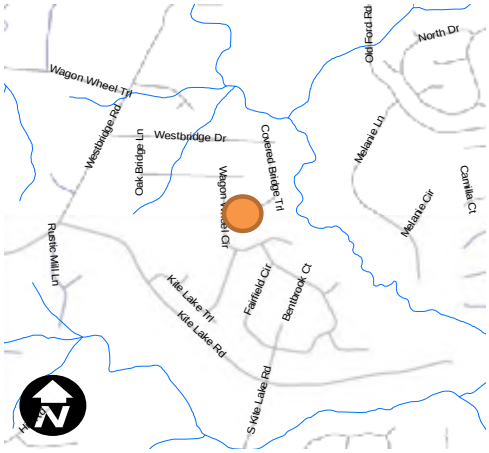
Project Description

Approximately 170 LF of drainage ditch rehab and plunge pool armoring; velocity dissipation or upsizing of pipe is necessary; elevation control and re-grading of ditch's profile

Approximate Cost Summary

$25,000

Map



Overview

PHOTO:

JACOBS

Dam Detail Cost Estimates to be added

Dam Detail Cost Estimates to be added

General Information	
Project ID	
Street Name	Lawson Lane
Site Visit Date	July 2, 2013
Road Classification	Internal Local

Project Notes

Undersized pipes in Northridge Subdivision results in flooding of road, lots and several homes along Lawson Lane. Project would replace existing pipe and add additional drainage structures.

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2
Existing Shld Width (paved and grass) (feet)	NA - curb & gutter
Existing Side Slopes	NA - curb & gutter
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	NA
Pipe Type and Size	CMP - 15-inch Dia.
Pipe Condition (1-5) (1 is new)	5

Condition Notes: Pipe is undersized for volume of water. History of associated flooding.

Pavement Type/Condition	damaged

Environmental Features	
Wetlands	No
Ditches	Sufficient, below downstream headwall

Utilities (Visual Inspection)	
Electric	Yes
Cable	Yes
Phone	Yes
Gas	Unknown
Water	Yes
Sewer	No
Other	

Map

Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Minimal impacts to traffic and access can be maintained to all properties.

Proposed Design

Roadway Section	Typical subdivision with roll-back curb & gutter
Culvert Size & Material	Replace existing pipe with 30-inch RCP or HDPE. New pipe to be 36-inch (min.) and RCP under road.
Utility Relocations	As needed
Guardrail Replacement	None
Miscellaneous Features	Extend new pipe to back of house to match existing.

Planning Cost Estimate

Type	Notes	Total
Design	Preliminary complete, finish in-house	0
Right of Way Cost	Easements needed - request donation	0
Utility Relocation Cost	Within ROW - non reimbursable	0
Construction Cost	See estimate sheet	$51,661
Environmental Permits	None expected	0
	Total Planning Estimate	$51,661

Estimate Sheet

FAYETTE COUNTY ROAD DEPARTMENT

Lawson Lane - Northridge S/D

BY: PJM
DATE: 7/2/13

Enhancement work based on previous staff investigation and July 2, 2013 field visit and discussion with property owners. Project includes:

100 Lawson Lane: replace existing 15-inch CMP with 30-inch pipe (200 ft) plus headwall
110 Lawson Lane: add 2 catch basins and 36-inch pipe, 230 ft plus headwall
125 Lawson Lane: add yard drain plus 36-inch pipe to new catch basins (150 ft)
105 Largo Lane: add flume to drain road to receiving water

ITEM	UNIT	QUAN	Infl	PROJ QUAN	MATERIAL COST	
					UNIT COST	TOTAL
Mobilization	lump	1	0%	1	0.00	0.00
Traffic Control	lump	1	0%	1	50.00	50.00
ESC	lump	1	0%	1	2500.00	2500.00
Drainage Systems:						
30" RCP	lf	200	0%	200	26.00	5200.00
30" HW	ea	1	0%	1	401.00	401.00
36" RCP	lf	380	0%	380	34.00	12920.00
36" Headwall	ea	1	0%	1	470.00	470.00
Catch Basin / Yard Drain	ea	3	0%	3	3000.00	9000.00
Foundation backfill	ton	398	0%	398	7.50	2985.00
Concrete Flume	ea	1	0%	1	3000.00	3000.00
Repair Road:						
Saw cut asphalt	lf	224	0%	224	0.50	112.00
Asphalt 9.5 mm Superpave 3.5"	ton	14	0%	14.0	47.00	658.00
GAB 12"	ton	28	0%	28	7.50	210.00
24" Rollback Curb	lf	20	0%	20	20.00	400.00
Grass / Landscaping (sod)	lump	1	0%	1	1500.00	1500.00
Equipment:						
Dump truck	hrs	40	0%	40	43.00	1720.00
Small Excavator	hrs	24	0%	24	40.00	960.00
Flat Bed truck	hrs	40	0%	40	28.00	1120.00
Crew cab pickup	hrs	40	0%	40	30.00	1200.00
Gradall	hrs	16	0%	16	39.00	624.00
Compactor plate	hrs	16	0%	16	6.75	108.00
Asphalt Spreader	hrs	8	0%	8	179.12	1432.96
Asphalt Roller (Lee Boy 400)	hrs	8	0%	8	12.50	100.00
Labor:						
4 man crew	hrs	48	0%	48	103.95	4989.60

$51,661

Dam Detail Cost Estimates to be added

General Information

Project ID	
Location	**Merrydale Dr**
Site Visit Date	6/11/13

Fayette County Notes

According to County notes, developer filled in floodplain and needs mitigation

Field Notes

Private property issues with fences on both sides of stream downstream of Merrydale within buffer; approx. 150' downstream of Merrydale stream plunges 10+ ft with severe erosion

Project Description

Approximately 500 LF of stream restoration that includes re-grading stream profile with elevation controls and creating floodplain to reconnect overbank flow

Existing Conditions Photo

Map

Overview

Total Planning Estimate	**$125,000.00**

Photo 1:

Photo 2:

Merrydale Drive

Photo Date:
5/21/2013
Taken By:
David King
Page:
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Photo 3:

Photo 4:

Merrydale Drive

Photo Date:
5/21/2013
Taken By:
David King
Page:
2

General Information	
Project ID	
Street Name	**330 Oak Street**
Site Visit Date	5/21/13
Road Classification	Internal Local

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2
Existing Shld Width (paved and grass) (feet)	1 - 2' Grass
Existing Side Slopes	2:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	5'
Pipe Type and Size	15" RCP
Pipe Condition (1-5) (1 is new)	5 (Installation)

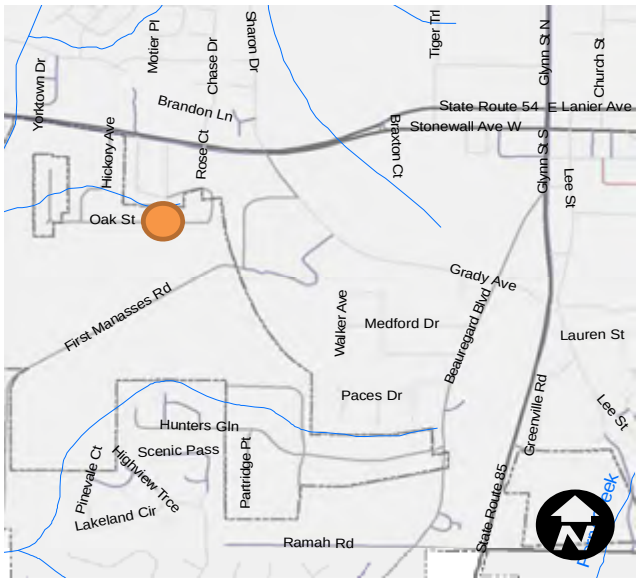
Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	Along South Side

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	3' x 2' box, concrete, 80' length
Utility Relocations	Water
Guardrail Replacement	
Miscellaneous Features	~ 200' drainage ditch or additional piping needs to be installed for downstream property. Receiving stream could use ~500' of stream restoration

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$4,000.00
Utility Relocation Cost		$5,500.00
Construction Cost		$44,006.47
Environmental Permits		$10,000.00
	Total Planning Estimate	**$78,506.47**

Fayette County

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Photo 1:

Photo 2:

Oak Street

Photo Date:
5/21/2013
Taken By:
David King
Page:
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Photo 3:

Photo 4:

Oak Street

Photo Date:
5/21/2013
Taken By:
David King
Page:
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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 3,618.39
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 3,618.39
Grading Complete (5% of Rwy Items & Drng Total $)			$ 1,317.52
Roadway Total			**$ 4,935.91**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	26	$ 18,293.72
Steel (lb)		$ 1.38	2559	$ 3,518.63
Type 2 Back Fill (cy)		$ 60.50	15.2	$ 919.60
Drainage Total				**$ 22,731.94**

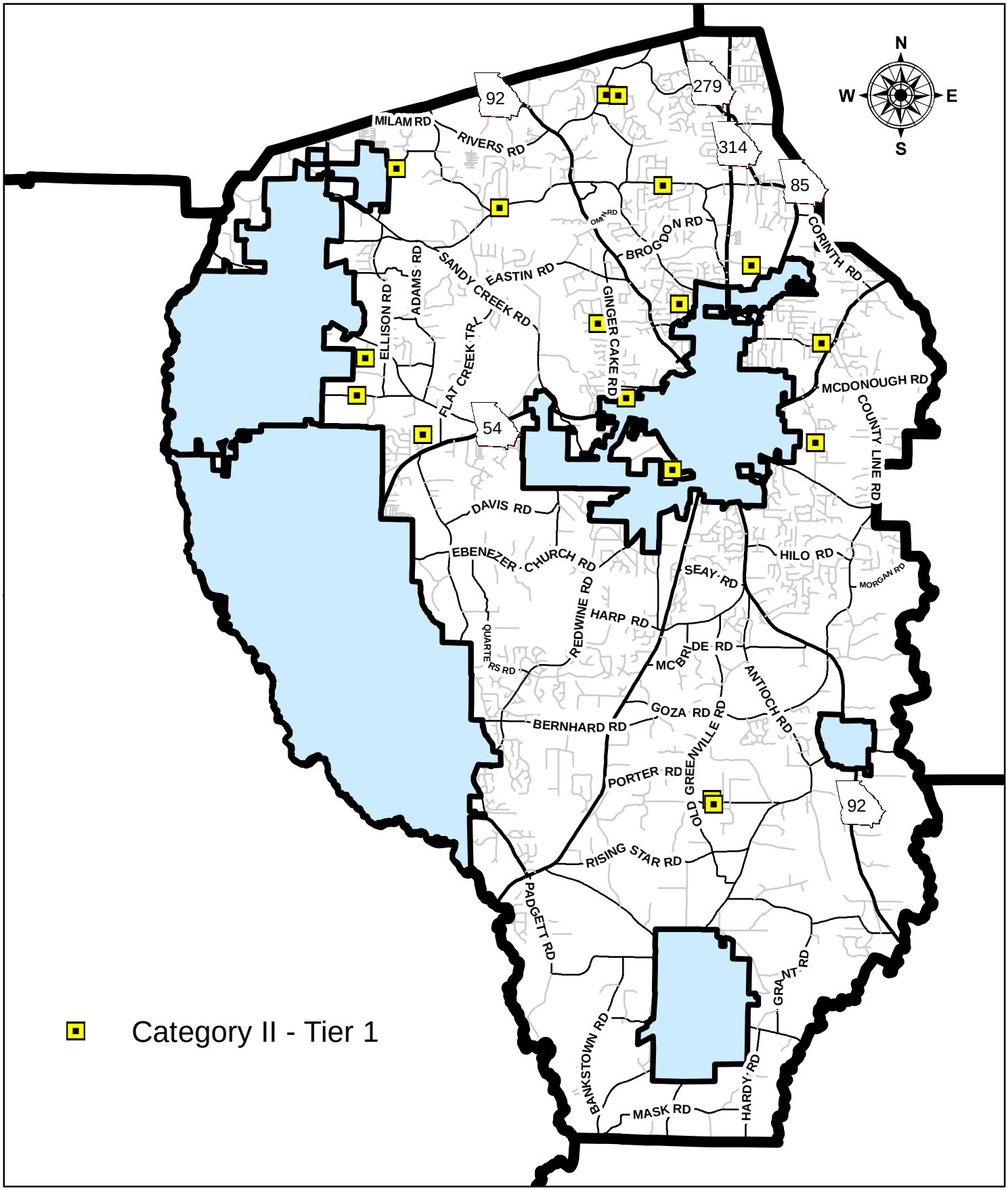
Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			$ 10,000.00

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.1	$ 41.80
Silt Fence (LF)	$ 5.50	200	$ 1,100.00
Check Dam Type C Silt Fence (LF)	$ 4.40	100	$ 440.00
Erosion Control Mats (SY)	$ 2.75	150	$ 412.50
Mulch (TN)	$ 286.00	1.4	$ 400.40
Perm Grassing (ac)	$ 9.90	0.1	$ 0.99
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00	0	$ -
Erosion Control Total			**$ 3,847.69**
Construction Cost Total			**$ 41,515.54**
Traffic Control (6% of Construction Total $)			**$ 2,490.93**
Construction Cost Grand Total			**$ 44,006.47**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 5,500.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	2000	$ 4,000.00
ROW Total			**$ 4,000.00**



CORE INFRASTRUCTURE SPLOST 2013

Draft for Public Comment

CATEGORY II

Project ID	Project Name	Replacement Description	Tier	Cost
	Avalon Dr	48" RCP, 300'	1	$105,531.97
	Brandon Mill Cir - South	8'x4' RBC, 200'; system evaluation	1	$300,321.42
	Broom Blvd	dbl 8'x5' RBC, 70'	1	$322,898.88
	Callaway Rd	trp 10'x4' RBC, 80'	1	$406,887.39
	Chappel Rd	dbl 8'x5' RBC, 70'	1	$331,399.88
	Deer Forest Trl	4'x3' RBC, 100'	1	$117,547.83
	Dogwood Trl	trp 7'x7' RBC, 80'	1	$411,832.37
	Lees Mill Rd	trp 9'x8' RBC, 35'	1	$246,586.75
	Mercedes Trl	dbl 8'x4' RBC, 60'	1	$173,524.76
	Morning Dove Dr	dbl 10'x4' RBC, 70'	1	$245,100.25
	Patricia Ln	8'x4' RBC, 150'	1	$209,317.86
	Roberts Rd	trp 10'x4' RBC, 85'	1	$359,641.62
	Scott Blvd	4'x2' RBC, 50'	1	$79,071.74
	Silver Leaf Dr	dbl 4'x3' RBC, 140'	1	$165,421.27
	Westbridge Dr	5'x3' RBC, 45'	1	$83,260.95
	Westbridge Dr	5'x3' RBC, 45'	1	$85,014.85
		Tier 1 Subtotal		**$3,643,359.79**

General Information	
Project ID	
Street Name	**Avalon Dr**
Site Visit Date	6/11/2013
Road Classification	Internal Local

Project Notes

Rural typical section

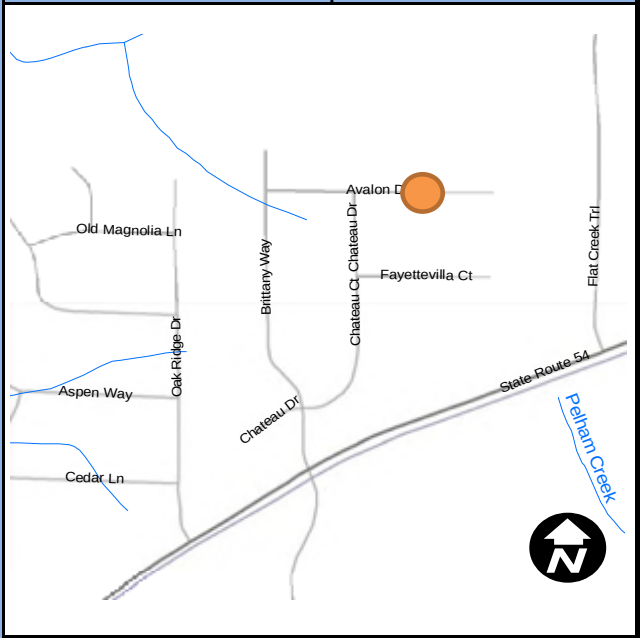
Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 12'
Existing Shld Width (paved and grass) (feet)	4' (Grass)
Existing Side Slopes	flat
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	4
Pipe Type and Size	30", 300' CMP
Pipe Condition (1-5) (1 is new)	3
Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	X

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	None
Water	X
Sewer	None
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	48", RCP, 300' length
Utility Relocations	Water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$7,821.09
Right of Way Cost		$4,000.00
Utility Relocation Cost		$5,500.00
Construction Cost		$78,210.88
Environmental Permits		$10,000.00
	Total Planning Estimate	**$105,531.97**

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Photo 1:

Photo 2:

Avalon Dr

Photo Date:
7/2/2013
Taken By:
David King
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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,809.19
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 1,809.19
Grading Complete (5% of Rwy Items & Drng Total $)			$ 2,918.44
Roadway Total			**$ 4,727.63**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	0	$ -
Steel (lb)		$ 1.38	0	$ -
Type 2 Back Fill (cy)		$ 60.50	67.1	$ 4,059.55
48" RCP		$ 175.00	300	$ 52,500.00
Drainage Total				**$ 56,559.55**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.1	$ 41.80
Silt Fence (LF)	$ 5.50	200	$ 1,100.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	50	$ 137.50
Mulch (TN)	$ 286.00	1.5	$ 429.00
Sod (SY)	$ 9.90	300	$ 2,970.00
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00	0	$ -
Erosion Control Total			**$ 6,130.30**
Construction Cost Total			**$ 72,417.48**
Traffic Control (8% of Construction Total $)			**$ 5,793.40**
Construction Cost Grand Total			**$ 78,210.88**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 5,500.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	2000	$ 4,000.00
ROW Total			**$ 4,000.00**

General Information	
Project ID	
Street Name	**Brandon Mill Cir - South**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Neighborhood drainage system evaluation and replacement. Urban typical section with valley gutter,

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-10'
Existing Shld Width (paved and grass) (feet)	4'
Existing Side Slopes	flat
Existing Guardrail	none
Depth fm Pavement to Top of Culvert (ft):	4
Pipe Type and Size	72" CMP
Pipe Condition (1-5) (1 is new)	5 (Installation)

Condition Notes: no headwall upstream or down; bends restrict capacity; signs of flooding; pipe condition due to installation

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	

Map

Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes: Close roadway;

driveway over pipe; replacement impacts property to the right

Proposed Design

Roadway Section	
Culvert Size & Material	8' x 4' box, concrete, 200' length
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	Assumed hydraulic analysis of existing system

Planning Cost Estimate

Type	Notes	Total
System Evaluation		$25,000.00
Design		$20,356.49
Right of Way Cost		$15,000.00
Utility Relocation Cost		$26,400.00
Construction Cost		$203,564.93
Environmental Permits		$10,000.00
	Total Planning Estimate	**$300,321.42**

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Photo 1:

Photo 2:

Brandon Mill Cir - South

Photo Date:
5/21/2013
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Photo 3:

Photo 4:

Brandon Mill Cir - South

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5/21/2013
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Photo 5:

Photo 6:

Brandon Mill Cir - South

Photo Date:
5/21/2013
Taken By:
David King
Page:
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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,809.19
Curb and Gutter (LF)	$ 27.50	50	$ 1,375.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 3,184.19
Grading Complete (5% of Rwy Items & Drng Total $)			$ 8,301.66
Roadway Total			**$ 11,485.85**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	183.68	$ 128,300.48
Steel (lb)		$ 1.38	21835.00	$ 30,023.13
Type 2 Back Fill (cy)		$ 60.50	74.80	$ 4,525.40
Drainage Total				**$ 162,849.01**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			
Signing and Marking Total			**$ -**

Staging	Installation	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.6	$ 250.80
Silt Fence (LF)	$ 5.50	400	$ 2,200.00
Check Dam Type C Silt Fence (LF)	$ 4.40	200	$ 880.00
Erosion Control Mats (SY)	$ 2.75	350	$ 962.50
Mulch (TN)	$ 286.00	5.7	$ 1,630.20
Sod (SY)	$ 9.90	650	$ 6,435.00
Rip Rap (SY)	$ 66.00	30	$ 1,980.00
Plastic Filter Fabric (SY)	$ 6.60	30	$ 198.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 14,536.50**
Construction Cost Total			**$ 193,871.36**
Traffic Control (5% of Construction Total $)			**$ 9,693.57**
Construction Cost Grand Total			**$ 203,564.93**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	75	$ 7,425.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	75	$ 8,250.00
Sewer				
12" main	$ 16.50	$ 75.00	0	$ -
Utility Relocation Total				**$ 26,400.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	7500	$ 15,000.00
ROW Total			**$ 15,000.00**

General Information	
Project ID	
Street Name	**Broome Blvd.**
Site Visit Date	5/21/13
Road Classification	Internal Local

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 12'
Existing Shld Width (paved and grass) (feet)	2
Existing Side Slopes	flat
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	4
Pipe Type and Size	3.5x2.5 egg CMP
Pipe Condition (1-5) (1 is new)	5

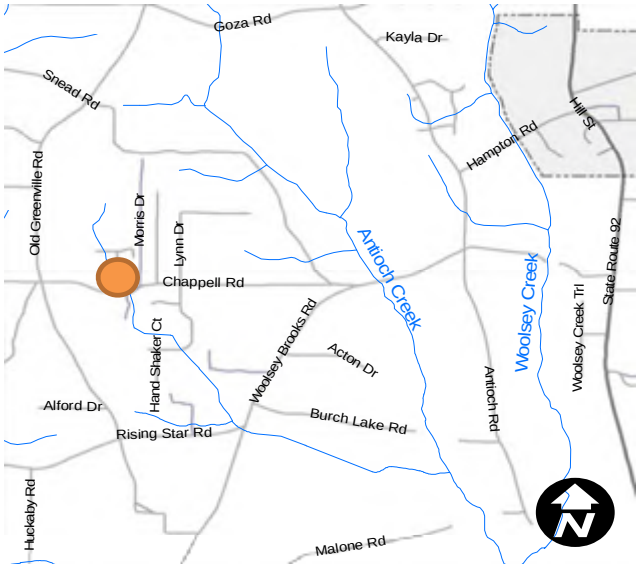
Condition Notes: crushed headwall and pipe entrance

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	
Ditches	

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	X

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	dbl 8' x 5' box, concrete, 70' length
Utility Relocations	Cable, telephone, water
Guardrail Replacement	
Miscellaneous Features	Upstream bend in stream adjacent to roadway may need additional bank stabilization

Planning Cost Estimate

Type	Notes	Total
Design		$23,963.53
Right of Way Cost		$24,000.00
Utility Relocation Cost		$25,300.00
Construction Cost		$239,635.35
Environmental Permits		$10,000.00
	Total Planning Estimate	**$322,898.88**

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Photo 1:

Photo 2:

Broome Blvd

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Broome Blvd

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 4,348.46
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20	625	$ 35,750.00
End Anchorage (EA)	$ 2,530.00	2	$ 5,060.00
Subtotal			$ 45,158.46
Grading Complete (5% of Rwy Items & Drng Total $)			$ 7,951.12
Roadway Total			**$ 53,109.58**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	133	$ 92,558.24
Condition Notes:		$ 1.38	13383	$ 18,401.63
Type 2 Back Fill (cy)		$ 60.50	48	$ 2,904.00
Drainage Total				**$ 113,863.86**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ 500.00
Signing and Marking Total			**$ 500.00**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ 29,183.74
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 39,183.74**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	1.5	$ 627.00
Silt Fence (LF)	$ 5.50	1600	$ 8,800.00
Check Dam Type C Silt Fence (LF)	$ 4.40	500	$ 2,200.00
Erosion Control Mats (SY)	$ 2.75	1000	$ 2,750.00
Mulch (TN)	$ 286.00	12.5	$ 3,575.00
Perm Grassing (ac)	$ 9.90	1	$ 9.90
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 19,413.90**
Construction Cost Total			**$ 226,071.08**
Traffic Control (6% of Construction Total $)			**$ 13,564.27**
Construction Cost Grand Total			**$ 239,635.35**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone	$ -	$ -		
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	100	$ 7,150.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable	$ -	$ -		
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	100	$ 7,150.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas	$ -	$ -		
4" main	$ 16.50	$ 66.00		$ -
Water	$ -	$ -		
8" main	$ 16.50	$ 93.50	100	$ 11,000.00
Sewer	$ -	$ -		
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 25,300.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	12000	$ 24,000.00
ROW Total			**$ 24,000.00**

General Information	
Project ID	
Street Name	**266 Callaway Rd.**
Site Visit Date	5/21/13
Road Classification	Collector

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 12'
Existing Shld Width (paved and grass) (feet)	2' (Grass)
Existing Side Slopes	2:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	
Pipe Type and Size	60" CMP (egg)
Pipe Condition (1-5) (1 is new)	4

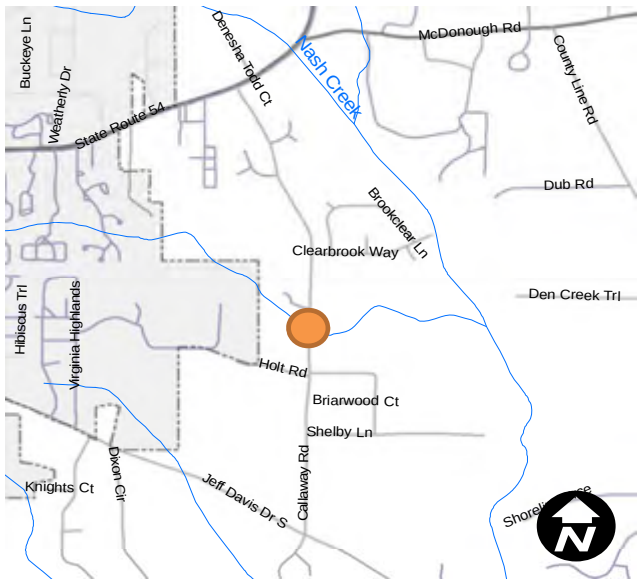
Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	Noted

Utilities (Visual Inspection)	
Electric	Aerial
Cable	None
Phone	Aerial
Gas	None
Water	Buried
Sewer	None
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

45 mph posted speed

Proposed Design

Roadway Section	
Culvert Size & Material	triple 10' x 4' box, concrete, 80' length
Utility Relocations	Water
Guardrail Replacement	Need to install guardrail due to side slopes and culvert installation
Miscellaneous Features	Zone A, Floodplain Analysis Required

Planning Cost Estimate

Type	Notes	Total
Design		$32,603.40
Right of Way Cost		$22,000.00
Utility Relocation Cost		$8,250.00
Construction Cost		$326,033.99
Environmental Permits	Permits, Floodplain Analysis	$18,000.00
	Total Planning Estimate	**$406,887.39**

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Photo 2:

Callaway Road

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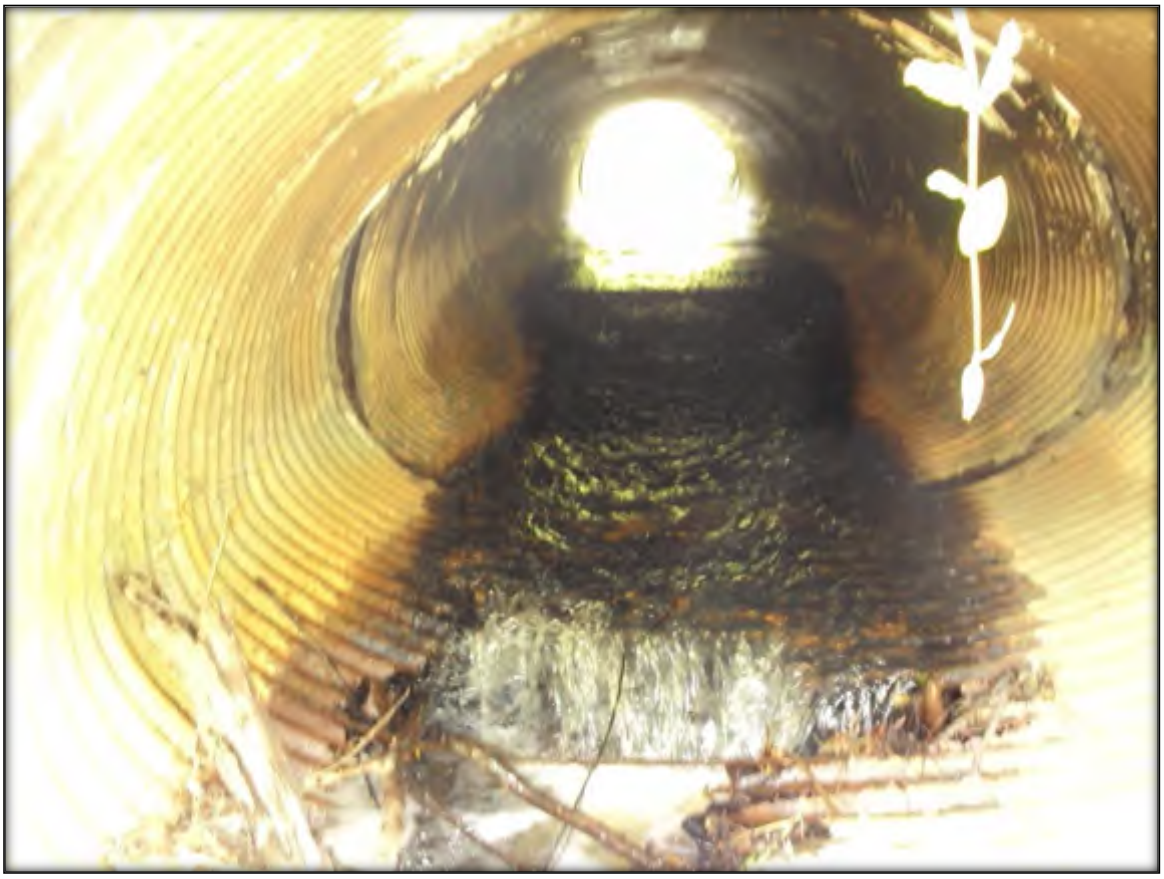

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Callaway Road

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 5,218.16
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20	600	34320
End Anchorage (EA)	$ 2,530.00	2	5060
Subtotal			$ 44,598.16
Grading Complete (5% of Rwy Items & Drng Total $)			$ 13,767.55
Roadway Total			**$ 58,365.71**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	262	$ 183,314.34
Steel (lb)		$ 1.38	30224	$ 41,558.00
Type 2 Back Fill (cy)		$ 60.50	97.2	$ 5,880.60
Drainage Total				**$ 230,752.94**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ 500.00
Signing and Marking Total			**$ 500.00**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			0
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 10,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.2	$ 83.60
Silt Fence (LF)	$ 5.50	600	$ 3,300.00
Check Dam Type C Silt Fence (LF)	$ 4.40	400	$ 1,760.00
Erosion Control Mats (SY)	$ 2.75	50	$ 137.50
Mulch (TN)	$ 286.00	1.75	$ 500.50
Perm Grassing (ac)	$ 9.90	0.1	$ 0.99
Rip Rap (SY)	$ 66.00	30	$ 1,980.00
Plastic Filter Fabric (SY)	$ 6.60	30	$ 198.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 7,960.59**
Construction Cost Total			**$ 307,579.24**
Traffic Control (6% of Construction Total $)			**$ 18,454.75**
Construction Cost Grand Total			**$ 326,033.99**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	75	$ 8,250.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 8,250.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	11000	**$ 22,000.00**
ROW Total			**$ 22,000.00**

General Information	
Project ID	
Street Name	**Chappell Rd.**
Site Visit Date	5/21/13
Road Classification	Collector

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 12'
Existing Shld Width (paved and grass) (feet)	1' - 2'
Existing Side Slopes	1.5:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	6'
Pipe Type and Size	1-72" CMP
Pipe Condition (1-5) (1 is new)	3

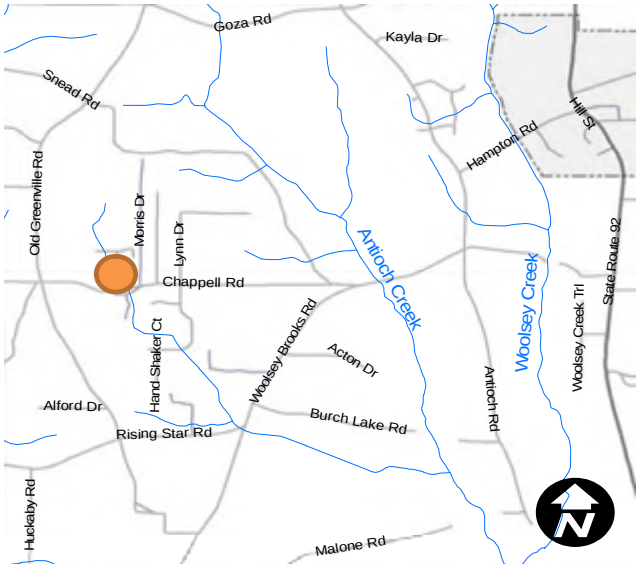
Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	Upstream (?)
Ditches	Along road

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	X

Stage Construction Notes:
Near side street and driveway
40 mph work zone

Proposed Design

Roadway Section	
Culvert Size & Material	dbl 8' x 5' box, concrete, 70' length
Utility Relocations	Cable, telephone, water
Guardrail Replacement	Proposed Guardrail Installation due to proposed culvert(s) and side slopes
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$23,963.53
Right of Way Cost		$32,500.00
Utility Relocation Cost		$25,300.00
Construction Cost		$239,635.35
Environmental Permits		$10,000.00
	Total Planning Estimate	**$331,398.88**

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Chappell Road

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Chappell Road

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 4,348.46
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20	625	$ 35,750.00
End Anchorage (EA)	$ 2,530.00	2	$ 5,060.00
Subtotal			$ 45,158.46
Grading Complete (5% of Rwy Items & Drng Total $)			$ 7,951.12
Roadway Total			**$ 53,109.58**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	133	$ 92,558.24
Condition Notes:		$ 1.38	13383	$ 18,401.63
Type 2 Back Fill (cy)		$ 60.50	48	$ 2,904.00
Drainage Total				**$ 113,863.86**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ 500.00
Signing and Marking Total			**$ 500.00**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ 29,183.74
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 39,183.74**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	1.5	$ 627.00
Silt Fence (LF)	$ 5.50	1600	$ 8,800.00
Check Dam Type C Silt Fence (LF)	$ 4.40	500	$ 2,200.00
Erosion Control Mats (SY)	$ 2.75	1000	$ 2,750.00
Mulch (TN)	$ 286.00	12.5	$ 3,575.00
Perm Grassing (ac)	$ 9.90	1	$ 9.90
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 19,413.90**
Construction Cost Total			**$ 226,071.08**
Traffic Control (6% of Construction Total $)			**$ 13,564.27**
Construction Cost Grand Total			**$ 239,635.35**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	100	$ 7,150.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	100	$ 7,150.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	100	$ 11,000.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 25,300.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	16250	$ 32,500.00
ROW Total			**$ 32,500.00**

General Information	
Project ID	
Street Name	**120 Deer Forest Trail**
Site Visit Date	5/21/13
Road Classification	Internal Local

Project Notes

Urban Typical Section with Valley Gutter

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 12'
Existing Shld Width (paved and grass) (feet)	None
Existing Side Slopes	Flat
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	2
Pipe Type and Size	36" CMP,100'
Pipe Condition (1-5) (1 is new)	5

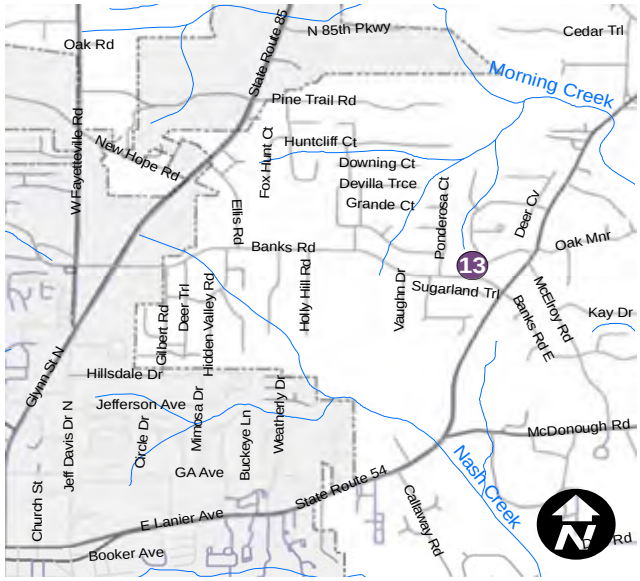
Condition Notes: Headwall failed on downstream side, active erosion, effectively 0% capacity

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options

Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	4' x 3' box, concrete, 100' length
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$10,000.00
Utility Relocation Cost		$17,600.00
Construction Cost		$64,947.83
Environmental Permits		$10,000.00
	Total Planning Estimate	**$117,547.83**

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Deer Forest Trail

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Deer Forest Trail

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 2,412.26
Curb and Gutter (LF)	$ 27.50	80	$ 2,200.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 4,612.26
Grading Complete (5% of Rwy Items & Drng Total $)			$ 2,152.57
Roadway Total			**$ 6,764.83**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	45	$ 31,160.09
Steel (lb)		$ 1.38	4295	$ 5,905.63
Type 2 Back Fill (cy)		$ 60.50	22.7	$ 1,373.35
Drainage Total				**$ 38,439.06**

Signing and Marking	Installation	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.3	$ 125.40
Silt Fence (LF)	$ 5.50	400	$ 2,200.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	75	$ 206.25
Mulch (TN)	$ 286.00	4	$ 1,144.00
Sod (SY)	$ 9.90	600	$ 5,940.00
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00	0	$ -
Erosion Control Total			**$ 11,067.65**
Construction Cost Total			**$ 61,271.54**
Traffic Control (6% of Construction Total $)			**$ 3,676.29**
Construction Cost Grand Total			**$64,947.83**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	50	$ 4,950.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	50	$ 3,575.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	50	$ 3,575.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$17,600.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	5000	$ 10,000.00
ROW Total			**$10,000.00**

General Information	
Project ID	
Street Name	**Dogwood Trail**
Site Visit Date	5/22/13
Road Classification	Collector

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12'
Existing Shld Width (paved and grass) (feet)	1' - 2'
Existing Side Slopes	1.5:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	12
Pipe Type and Size	2-120" CMP
Pipe Condition (1-5) (1 is new)	4

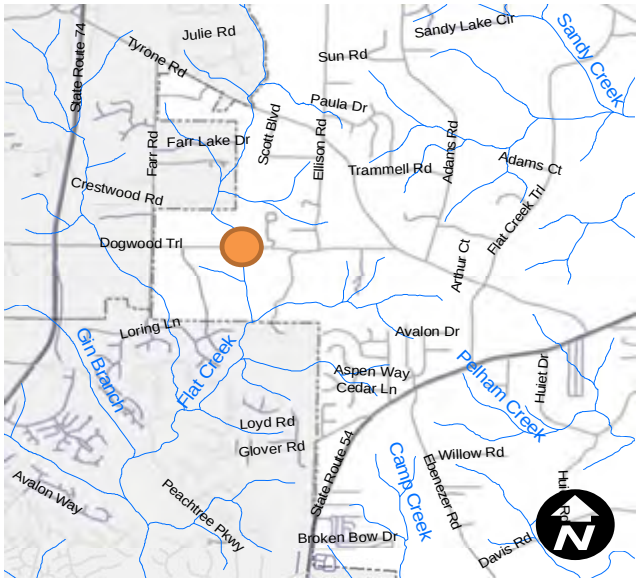
Condition Notes: Large down stream drop; home in down stream flood plain; bottom of pipe rusted through

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	Noted

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	
Water	Buried
Sewer	Buried
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	triple 7' x 7' box, concrete, 80' length
Utility Relocations	Electric, cable, phone, water, sewer
Guardrail Replacement	Need Guardrail due to side slopes and culvert installation
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$28,088.17
Right of Way Cost		$55,600.00
Utility Relocation Cost		$37,262.50
Construction Cost		$280,881.70
Environmental Permits		$10,000.00
	Total Planning Estimate	**$411,832.37**

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Dogwood Trail

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Dogwood Trail

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 5,218.16
Curb and Gutter (LF)	$ 27.50	0	$ -
4" Sidewalk (SY)	$ 49.50	0	$ -
Guardrail (LF)	$ 57.20	600	$ 34,320.00
End Anchorage (EA)	$ 2,530.00	4	$ 10,120.00
Subtotal			$ 49,658.16
Grading Complete (5% of Rwy Items & Drng Total $)			$ 11,762.05
Roadway Total			**$ 61,420.21**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	213	$ 148,501.10
Steel (lb)		$ 1.38	23893	$ 32,852.88
Type 2 Back Fill (cy)		$ 60.50	69.9	$ 4,228.95
Drainage Total				**$ 185,582.93**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ 500.00
Signing and Marking Total			**$ 500.00**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 10,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.12	$ 50.16
Silt Fence (LF)	$ 5.50	700	$ 3,850.00
Check Dam Type C Silt Fence (LF)	$ 4.40	200	$ 880.00
Erosion Control Mats (SY)	$ 2.75	75	$ 206.25
Mulch (TN)	$ 286.00	1.1	$ 314.60
Perm Grassing (ac)	$ 9.90	0.06	$ 0.59
Rip Rap (SY)	$ 66.00	30	$ 1,980.00
Plastic Filter Fabric (SY)	$ 6.60	30	$ 198.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 7,479.60**
Construction Cost Total			**$ 264,982.74**
Traffic Control (6% of Construction Total $)			**$ 15,898.96**
Construction Cost Grand Total			**$ 280,881.70**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00	100	$ 6,600.00
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00	3	$ 2,062.50
Phone				
Aerial	$ 11.00	$ 27.50	100	$ 3,850.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50	100	$ 3,850.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	100	$ 11,000.00
Sewer				
12" main	$ 16.50	$ 82.50	100	$ 9,900.00
Utility Relocation Total				**$ 37,262.50**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Fee Simple	$ 4.00	13900	$ 55,600.00
ROW Total			**$ 55,600.00**

General Information	
Project ID	
Street Name	**413 Lees Mill Rd**
Site Visit Date	5/22/13
Road Classification	Minor Arterial

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 12'
Existing Shld Width (paved and grass) (feet)	2' Grass
Existing Side Slopes	4:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	5.5'
Pipe Type and Size	3 - 72" CMP
Pipe Condition (1-5) (1 is new)	3

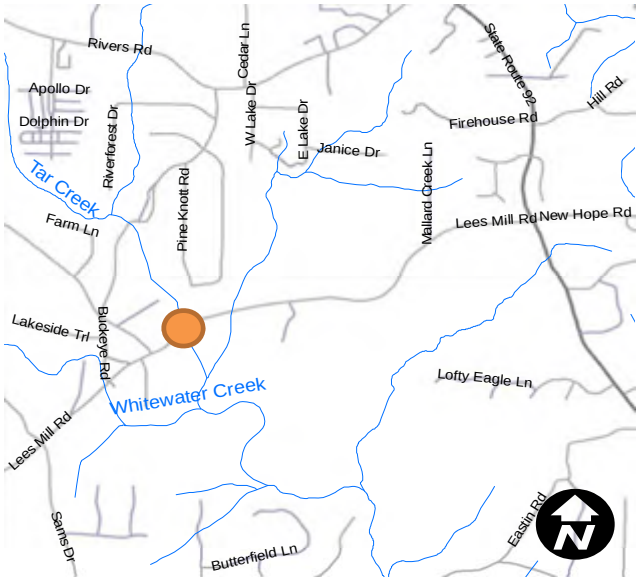
Condition Notes: Down stream joint failure; two barrells not receiving flow

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	X

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	triple 9' x 8' box, concrete, 35' length
Utility Relocations	Aerial electric, phone, cable, and water
Guardrail Replacement	Should add guardrail due to culvert and droppoff
Miscellaneous Features	Zone AE with Floodway, Floodplain Analysis Required

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost	No Impact	$0.00
Utility Relocation Cost		$26,675.00
Construction Cost		$179,911.75
Environmental Permits	Permits, Floodplain Analysis	$25,000.00
	Total Planning Estimate	**$246,586.75**

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Photo 2:

Lees Mill Road

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Photo 3:

Photo 4:

Lees Mill Road

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 5,719.80
Curb and Gutter (LF)	$ 27.50	0	$ -
4" Sidewalk (SY)	$ 49.50	0	$ -
Guardrail (LF)	$ 57.20	600	$ 34,320.00
End Anchorage (EA)	$ 2,530.00	2	$ 5,060.00
Subtotal			$ 45,099.80
Grading Complete (5% of Rwy Items & Drng Total $)			$ 7,188.22
Roadway Total			**$ 52,288.02**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	115	$ 80,397.35
Steel (lb)		$ 1.38	11538.5	$ 15,865.44
Type 2 Back Fill (cy)		$ 60.50	39.7	$ 2,401.85
Drainage Total				**$ 98,664.64**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping			$ 500.00
Signing and Marking Total			**$ 500.00**

Staging	Installation	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 10,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.04	$ 16.72
Silt Fence (LF)	$ 5.50	350	$ 1,925.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	250	$ 687.50
Mulch (TN)	$ 286.00	0.7	$ 200.20
Perm Grassing (ac)	$ 9.90	0.1	$ 0.99
Rip Rap (SY)	$ 66.00	75	$ 4,950.00
Plastic Filter Fabric (SY)	$ 6.60	75	$ 495.00
4" Ditch Paving (SY)	$ 33.00	0	$ -
Erosion Control Total			**$ 8,275.41**
Construction Cost Total			**$ 169,728.07**
Traffic Control (6% of Construction Total $)			**$ 10,183.68**
Construction Cost Grand Total			**$ 179,911.75**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00	100	$ 6,600.00
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00	2	$ 1,375.00
Phone				
Aerial	$ 11.00	$ 27.50	100	$ 3,850.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50	100	$ 3,850.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	100	$ 11,000.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 26,675.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
No Impact	0	0	$ -
ROW Total			**$ -**

General Information	
Project ID	
Street Name	**120 Mercedes Trail**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Urban typical with valley gutter; subdivision street

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12'
Existing Shld Width (paved and grass) (feet)	4'
Existing Side Slopes	flat
Existing Guardrail	none
Depth fm Pavement to Top of Culvert (ft):	5
Pipe Type and Size (ellip. CMP)	2-48"x72";55'
Pipe Condition (1-5) (1 is new)	5

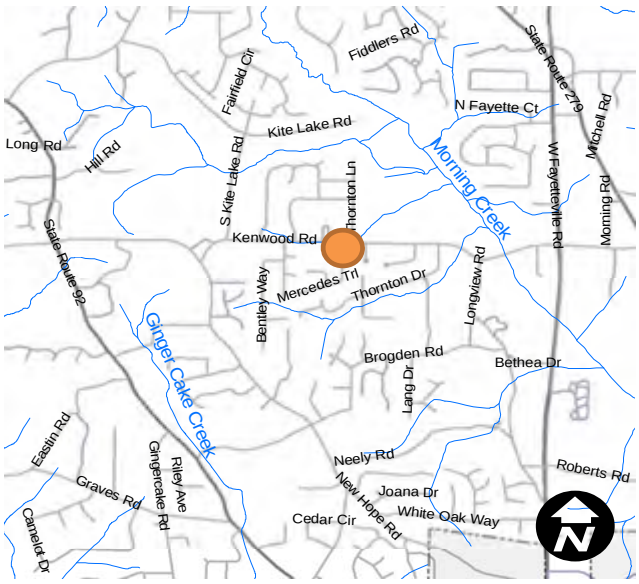
Condition Notes: Both up to 25% blocked, structurally unsound, sag in top of pipe, debris/rip rap in pipe

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	X
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	dbl 8' x 4' box, concrete, 60' length
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$4,000.00
Utility Relocation Cost		$17,600.00
Construction Cost		$126,924.76
Environmental Permits		$10,000.00
	Total Planning Estimate	**$173,524.76**

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Photo 2:

Mercedes Trail

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Mercedes Trail

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 3,618.39
Curb and Gutter (LF)	$ 27.50	100	$ 2,750.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 6,368.39
Grading Complete (5% of Rwy Items & Drng Total $)			$ 4,989.60
Roadway Total			**$ 11,357.99**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	108	$ 75,549.76
Steel (lb)		$ 1.38	11182	$ 15,375.25
Type 2 Back Fill (cy)		$ 60.50	41.3	$ 2,498.65
Drainage Total				$ 93,423.66

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 10,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.08	$ 33.44
Silt Fence (LF)	$ 5.50	150	$ 825.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	75	$ 206.25
Mulch (TN)	$ 286.00	0.75	$ 214.50
Sod (SY)	$ 9.90	225	$ 2,227.50
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 4,958.69**
Construction Cost Total			**$ 119,740.34**
Traffic Control (6% of Construction Total $)			**$ 7,184.42**
Construction Cost Grand Total			**$ 126,924.76**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	50	$ 4,950.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	50	$ 3,575.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	50	$ 3,575.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 17,600.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	2000	$ 4,000.00
ROW Total			**$ 4,000.00**

General Information	
Project ID	
Street Name	**Morning Dove Dr.**
Site Visit Date	5/21/13
Road Classification	Internal Local

Project Notes

Urban typical section valley gutter

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12'
Existing Shld Width (paved and grass) (feet)	4'
Existing Side Slopes	flat
Existing Guardrail	none
Depth fm Pavement to Top of Culvert (ft):	2'
Pipe Type and Size	1-72", 1-84"
Pipe Condition (1-5) (1 is new)	4

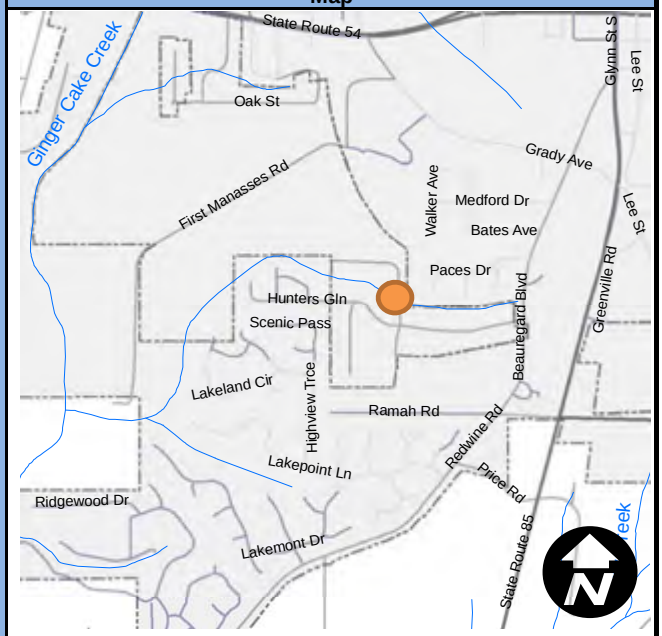
Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None identified
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	Not Sighted
Water	Buried
Sewer	Buried
Other	

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	X

Stage Construction Notes:
Approx. 200' of temporary pavement

Proposed Design

Roadway Section	Replace in kind
Culvert Size & Material	double 10' x 4' box, concrete, 70' length
Utility Relocations	Electric, Cable, Phone, Water, Sewer
Guardrail Replacement	No
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost	project has no impacts	$0.00
Utility Relocation Cost		$33,825.00
Construction Cost		$186,275.25
Environmental Permits		$10,000.00
	Total Planning Estimate	**$245,100.25**

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Photo 2:

130 Morning Dove Drive

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 2,894.71
Curb and Gutter (LF)	$ 27.50	150	$ 4,125.00
4" Sidewalk (SY)	$ 49.50	0	$ -
Guardrail (LF)	$ 57.20	0	$ -
End Anchorage (EA)	$ 2,530.00	0	$ -
Subtotal			$ 7,019.71
Grading Complete (5% of Rwy Items & Drng Total $)			$ 7,429.14
Roadway Total			**$ 14,448.86**

Drainage	Removal Unit Cost	Amount	Total Cost
Class A Conc (cy)	$ 698.50	163	$ 113,876.46
Steel (lb)	$ 1.38	17553	$ 24,135.38
Type 2 Back Fill (cy)	$ 60.50	58.7	$ 3,551.35
Drainage Total			**$ 141,563.18**

Signing and Marking	Amount	Total Cost
Permanent Striping		$ 500.00
Signing and Marking Total		**$ 500.00**

Staging	Amount	Total Cost
Temporary Pavement		$ 5,953.65
Temporary Drainage (Stream Diversion)	$ 5,500.00	1	$ 5,500.00
Staging Total		**$ 11,453.65**

Erosion Control	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.14	$ 58.52
Silt Fence (LF)	$ 5.50	350	$ 1,925.00
Check Dam Type C Silt Fence (LF)	$ 4.40	100	$ 440.00
Erosion Control Mats (SY)	$ 2.75	100	$ 275.00
Mulch (TN)	$ 286.00	1.3	$ 371.80
Sod (SY)	$ 9.90	350	$ 3,465.00
Rip Rap (SY)	$ 66.00	40	$ 2,640.00
Plastic Filter Fabric (SY)	$ 6.60	40	$ 264.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 9,439.32**
Construction Cost Total			**$ 177,405.00**
Traffic Control (5% of Construction Total $)			**$ 8,870.25**
Construction Cost Grand Total			**$ 186,275.25**

Utility Relocation	Removal Unit Cost	Amount	Total Cost
Electric			
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	75	$ 7,425.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone			
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable			
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas			
4" main	$ 16.50	$ 66.00		$ -
Water			
8" main	$ 16.50	$ 93.50	75	$ 8,250.00
Sewer			
12" main	$ 16.50	$ 82.50	75	$ 7,425.00
Utility Relocation Total			**$ 33,825.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
No Impact	$ -	0	$ -
ROW Total			**$ -**

General Information	
Project ID	
Street Name	**Patricia Lane**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Urban typical section with curb and gutter

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 10'
Existing Shld Width (paved and grass) (feet)	4'
Existing Side Slopes	Flat
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	2.5
Pipe Type and Size	54" CMP
Pipe Condition (1-5) (1 is new)	4

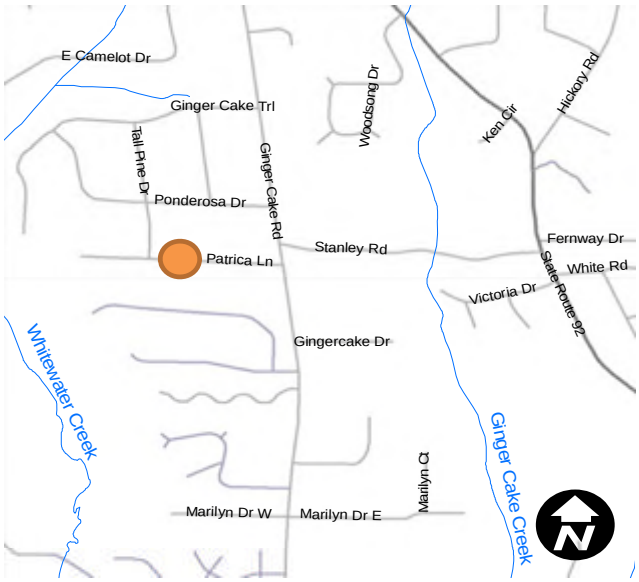
Condition Notes: Joint failure, signs of rust, downstream plunge pool needed, eroded drop, holes from scour on top, rip rap/debris inside of pipe

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Buried
Gas	
Water	
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	X
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	8' x 4' box, concrete, 150' length
Utility Relocations	Pole next to pipe, phone, cable, electric
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$20,000.00
Utility Relocation Cost		$6,737.50
Construction Cost		$157,580.36
Environmental Permits		$10,000.00
	Total Planning Estimate	**$209,317.86**

Fayette County

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Photo 1:

Photo 2:

Patricia Lane

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Patricia Lane

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Photo 5:

Photo 6:

Patricia Lane

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 3,015.32
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 3,015.32
Grading Complete (5% of Rwy Items & Drng Total $)			$ 6,381.27
Roadway Total			**$ 9,396.59**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	141	$ 98,509.46
Steel (lb)		$ 1.38	16505	$ 22,694.38
Type 2 Back Fill (cy)		$ 60.50	56.3	$ 3,406.15
Drainage Total				**$ 124,609.98**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.3	$ 125.40
Silt Fence (LF)	$ 5.50	400	$ 2,200.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	125	$ 343.75
Mulch (TN)	$ 286.00	5.5	$ 1,573.00
Sod (SY)	$ 9.90	400	$ 3,960.00
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00		$ -
			$ -
Erosion Control Total			**$ 9,654.15**
Construction Cost Total			**$ 148,660.72**
Traffic Control (6% of Construction Total $)			**$ 8,919.64**
Construction Cost Grand Total			**$157,580.36**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	25	$ 2,475.00
Wooden Pole	$ 82.50	$ 605.00	1	$ 687.50
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	25	$ 1,787.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	25	$ 1,787.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	0	$ -
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 6,737.50**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	10000	$ 20,000.00
ROW Total			**$ 20,000.00**

General Information	
Project ID	
Street Name	**199 Roberts Road**
Site Visit Date	5/21/13
Road Classification	County Local

Project Notes

Local road with sub standard horizontal and vertical alignments

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-10' (dirt/gravel)
Existing Shld Width (paved and grass) (feet)	None
Existing Side Slopes	flat
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	None
Pipe Type and Size	None
Pipe Condition (1-5) (1 is new)	n/a

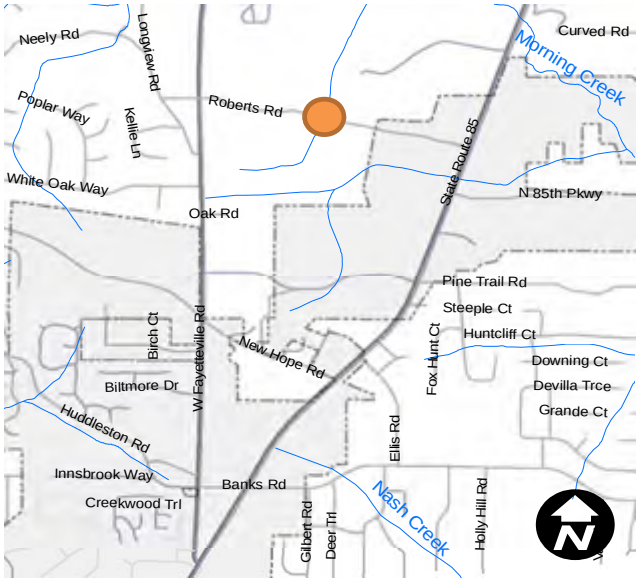
Condition Notes:

Pavement Type/Condition	gravel dirt/ poor

Environmental Features	
Wetlands	Noted
Ditches	None

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	X
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	triple 10'x4' box, concrete, 85' length
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$28,633.33
Right of Way Cost		$8,000.00
Utility Relocation Cost		$26,675.00
Construction Cost		$286,333.29
Environmental Permits		$10,000.00
	Total Planning Estimate	**$359,641.62**

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Roberts Road

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 3,668.66
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 3,668.66
Grading Complete (5% of Rwy Items & Drng Total $)			12386.94042
Roadway Total			**$ 16,055.60**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	277	$ 193,760.41
Steel (lb)		$ 1.38	32052.5	$ 44,072.19
Type 2 Back Fill (cy)		$ 60.50	103.1	$ 6,237.55
Drainage Total				$ 244,070.15

Signing and Marking	Installation	Amount	Total Cost
Permanent Striping (mile)			0
Signing and Marking Total			**$ -**

Staging	Installation	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 10,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00		
Silt Fence (LF)	$ 5.50		
Check Dam Type C Silt Fence (LF)	$ 4.40		
Erosion Control Mats (SY)	$ 2.75		
Mulch (TN)	$ 286.00		
Sod (SY)	$ 9.90		
Rip Rap (SY)	$ 66.00		
Plastic Filter Fabric (SY)	$ 6.60		
4" Ditch Paving (SY)	$ 33.00		
Erosion Control Total			**$ -**
Construction Cost Total			**$ 270,125.75**
Traffic Control (6% of Construction Total $)			**$ 16,207.54**
Construction Cost Grand Total			**$ 286,333.29**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00	100	$ 6,600.00
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00	2	$ 1,375.00
Phone				
Aerial	$ 11.00	$ 27.50	100	$ 3,850.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50	100	$ 3,850.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	100	$ 11,000.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 26,675.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Fee Simple	$ 2.00	4,000	$ 8,000.00
ROW Total			**$ 8,000.00**

General Information	
Project ID	
Street Name	**Scott Blvd.**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Rural typical section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-10.5'
Existing Shld Width (paved and grass) (feet)	4' Grass
Existing Side Slopes	6:1 to flat
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	10 - 11
Pipe Type and Size	18" CMP
Pipe Condition (1-5) (1 is new)	5

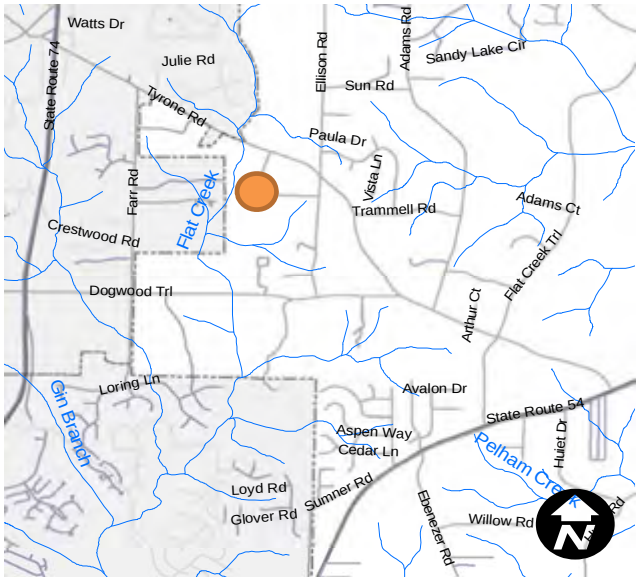
Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	Upstream
Ditches	Noted

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	None
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Driveway at downstream end that will need to be

Proposed Design

Roadway Section	
Culvert Size & Material	4' x 2' box, concrete, 50'
Utility Relocations	Electric, cable,phone, water
Guardrail Replacement	
Miscellaneous Features	Series of three, 18" pipes. Upper two are within reasonable sizes, second one in series could be upsized to 24". Downstream-most culvert is primary replacement need.

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$4,000.00
Utility Relocation Cost		$14,025.00
Construction Cost		$36,046.74
Environmental Permits		$10,000.00
	Total Planning Estimate	**$79,071.74**

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,990.11
Curb and Gutter (LF)	$ 27.50	0	0
4" Sidewalk (SY)	$ 49.50	0	0
Guardrail (LF)	$ 57.20	0	0
End Anchorage (EA)	$ 2,530.00	0	0
Subtotal			$ 1,990.11
Grading Complete (5% of Rwy Items & Drng Total $)			$ 1,142.85
Roadway Total			**$ 3,132.96**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	25	$ 17,155.16
Steel (lb)		$ 1.38	2189	$ 3,009.88
Type 2 Back Fill (cy)		$ 60.50	11.6	$ 701.80
Drainage Total				**$ 20,866.84**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			0
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.06	$ 25.08
Silt Fence (LF)	$ 5.50	250	$ 1,375.00
Check Dam Type C Silt Fence (LF)	$ 4.40	250	$ 1,100.00
Erosion Control Mats (SY)	$ 2.75	50	$ 137.50
Mulch (TN)	$ 286.00	1	$ 286.00
Perm Grassing (ac)	$ 9.90	0.125	$ 1.24
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00	0	$ -
Erosion Control Total			**$ 4,376.82**
Construction Cost Total			**$ 33,376.61**
Traffic Control (8% of Construction Total $)			**$ 2,670.13**
Construction Cost Grand Total			**$ 36,046.74**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00	50	$ 3,300.00
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00	2	$ 1,375.00
Phone				
Aerial	$ 11.00	$ 27.50	50	$ 1,925.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00	0	$ -
Cable				
Aerial	$ 11.00	$ 27.50	50	$ 1,925.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00	0	$ -
Gas				
4" main	$ 16.50	$ 66.00	0	$ -
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 14,025.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	2000	**$ 4,000.00**
ROW Total			**$ 4,000.00**

General Information	
Project ID	
Street Name	**Silver Leaf Drive**
Site Visit Date	5/21/13
Road Classification	Internal Local

Project Notes

Urban typical w/ valley gutter

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12'
Existing Shld Width (paved and grass) (feet)	10' Grass
Existing Side Slopes	4:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	5
Pipe Type and Size	1-54" CMP
Pipe Condition (1-5) (1 is new)	4

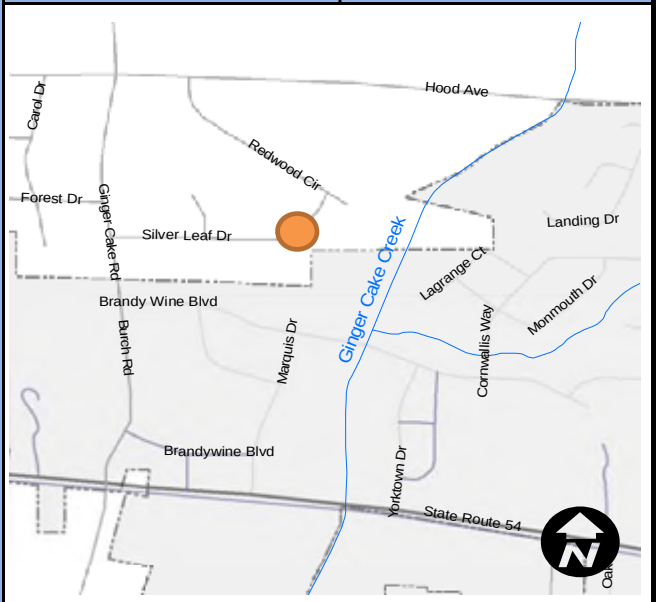
Condition Notes:

Pavement Type/Condition	Good

Environmental Features	
Wetlands	X (downstream)
Ditches	None

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Buried
Phone	Buried
Gas	Buried
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:
Replace inlet on each side

Proposed Design

Roadway Section	
Culvert Size & Material	dbl 4' x 3' box, concrete, 140'
Utility Relocations	Phone, cable, gas, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$9,600.00
Utility Relocation Cost		$16,775.00
Construction Cost		$114,046.27
Environmental Permits		$10,000.00
	Total Planning Estimate	**$165,421.27**

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 2,171.03
Curb and Gutter (LF)	$ 27.50	60	$ 1,650.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 3,821.03
Grading Complete (5% of Rwy Items & Drng Total $)			$ 4,503.52
Roadway Total			**$ 8,324.56**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	93	$ 64,827.79
Steel (lb)		$ 1.38	13265	$ 18,239.38
Type 2 Back Fill (cy)		$ 60.50	52.6	$ 3,182.30
Drainage Total				**$ 86,249.46**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.05	$ 20.90
Silt Fence (LF)	$ 5.50	200	$ 1,100.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	50	$ 137.50
Mulch (TN)	$ 286.00	0.9	$ 257.40
Sod (SY)	$ 9.90	400	$ 3,960.00
Rip Rap (SY)	$ 66.00	35	$ 2,310.00
Plastic Filter Fabric (SY)	$ 6.60	35	$ 231.00
4" Ditch Paving (SY)	$ 33.00	0	$ -
Erosion Control Total			**$ 8,016.80**
Construction Cost Total			**$ 107,590.82**
Traffic Control (6% of Construction Total $)			**$ 6,455.45**
Construction Cost Grand Total			**$ 114,046.27**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	50	$ 3,575.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	50	$ 3,575.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00	50	$ 4,125.00
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 16,775.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	4800	$ 9,600.00
ROW Total			**$ 9,600.00**

General Information	
Project ID	
Street Name	**503 Westbridge Drive**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Urban typical section with Curb and gutter

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12'
Existing Shld Width (paved and grass) (feet)	None
Existing Side Slopes	Flat
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	3
Pipe Type and Size (with headwall, 45º)	48" CMP; 45'
Pipe Condition (1-5) (1 is new)	4

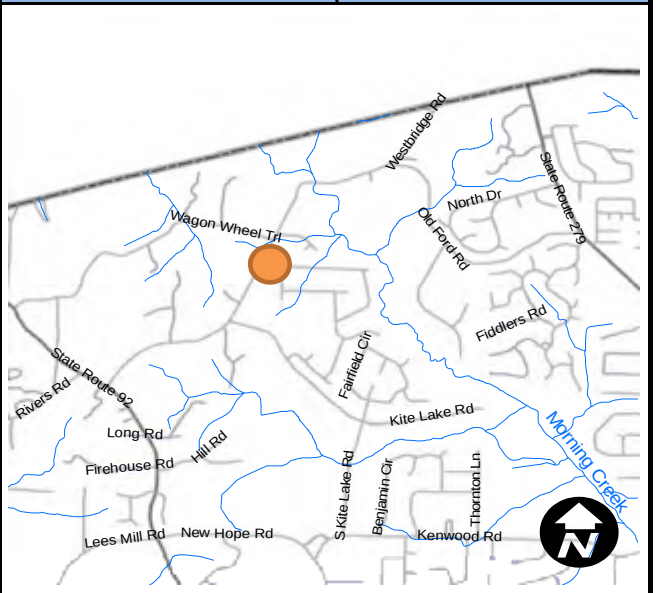
Condition Notes: Debris in channel; approx. 1.5' drop in last section of pipe; US filled/damaged to 3.5'

Pavement Type/Condition	Good/Asphalt

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	X
Maintain One Lane - Temp Pavement	

Stage Construction Notes: Stage construction such that one lane is open at all times; street light next to crossing

Proposed Design

Roadway Section	
Culvert Size & Material	5' x 3' box, concrete, 45' Length
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$2,400.00
Utility Relocation Cost		$14,080.00
Construction Cost		$41,780.95
Environmental Permits		$10,000.00
	Total Planning Estimate	**$83,260.95**

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,447.36
Curb and Gutter (LF)	$ 27.50	40	$ 1,100.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 2,547.36
Grading Complete (5% of Rwy Items & Drng Total $)			$ 1,310.66
Roadway Total			**$ 3,858.02**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	28	$ 19,449.73
Steel (lb)		$ 1.38	2529.5	$ 3,478.06
Type 2 Back Fill (cy)		$ 60.50	12.2	$ 738.10
Drainage Total				**$ 23,665.90**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.05	$ 20.90
Silt Fence (LF)	$ 5.50	200	$ 1,100.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	45	$ 123.75
Mulch (TN)	$ 286.00		$ 0.50
Sod (SY)	$ 9.90	350	$ 3,465.00
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00	0	$ -
Erosion Control Total			**$ 6,162.15**
Construction Cost Total			**$ 38,686.06**
Traffic Control (8% of Construction Total $)			**$ 3,094.89**
Construction Cost Grand Total			**$ 41,780.95**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	40	$ 3,960.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	40	$ 2,860.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	40	$ 2,860.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	40	$ 4,400.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 14,080.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	1200	$ 2,400.00
ROW Total			**$ 2,400.00**

General Information	
Project ID	
Street Name	**517 Westbridge Drive**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Urban typical section with Curb and gutter

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12'
Existing Shld Width (paved and grass) (feet)	None
Existing Side Slopes	Flat
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	3
Pipe Type and Size	54" CMP
Pipe Condition (1-5) (1 is new)	4

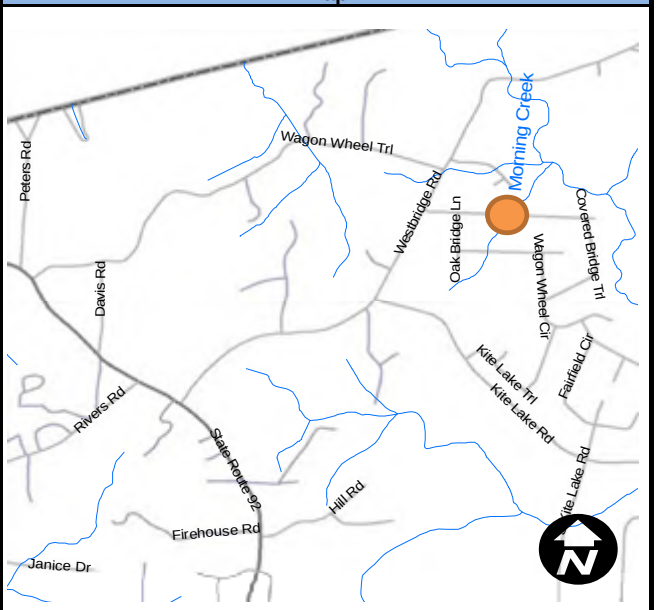
Condition Notes: 0.5' drop; 1' of sand in pipe (45' pipe length); Capacity Issue

Pavement Type/Condition	

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	X
Maintain One Lane - Temp Pavement	

Stage Construction Notes: Stage const. such that one lane is open at all times

Proposed Design

Roadway Section	
Culvert Size & Material	5' x 3' box, concrete, 45' length
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$4,000.00
Utility Relocation Cost		$14,080.00
Construction Cost		$41,934.85
Environmental Permits		$10,000.00
	Total Planning Estimate	**$85,014.85**

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,447.36
Curb and Gutter (LF)	$ 27.50	40	$ 1,100.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 2,547.36
Grading Complete (5% of Rwy Items & Drng Total $)			$ 1,310.66
Roadway Total			**$ 3,858.02**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	28	$ 19,449.73
Steel (lb)		$ 1.38	2529.5	$ 3,478.06
Type 2 Back Fill (cy)		$ 60.50	12.2	$ 738.10
Drainage Total				**$ 23,665.90**

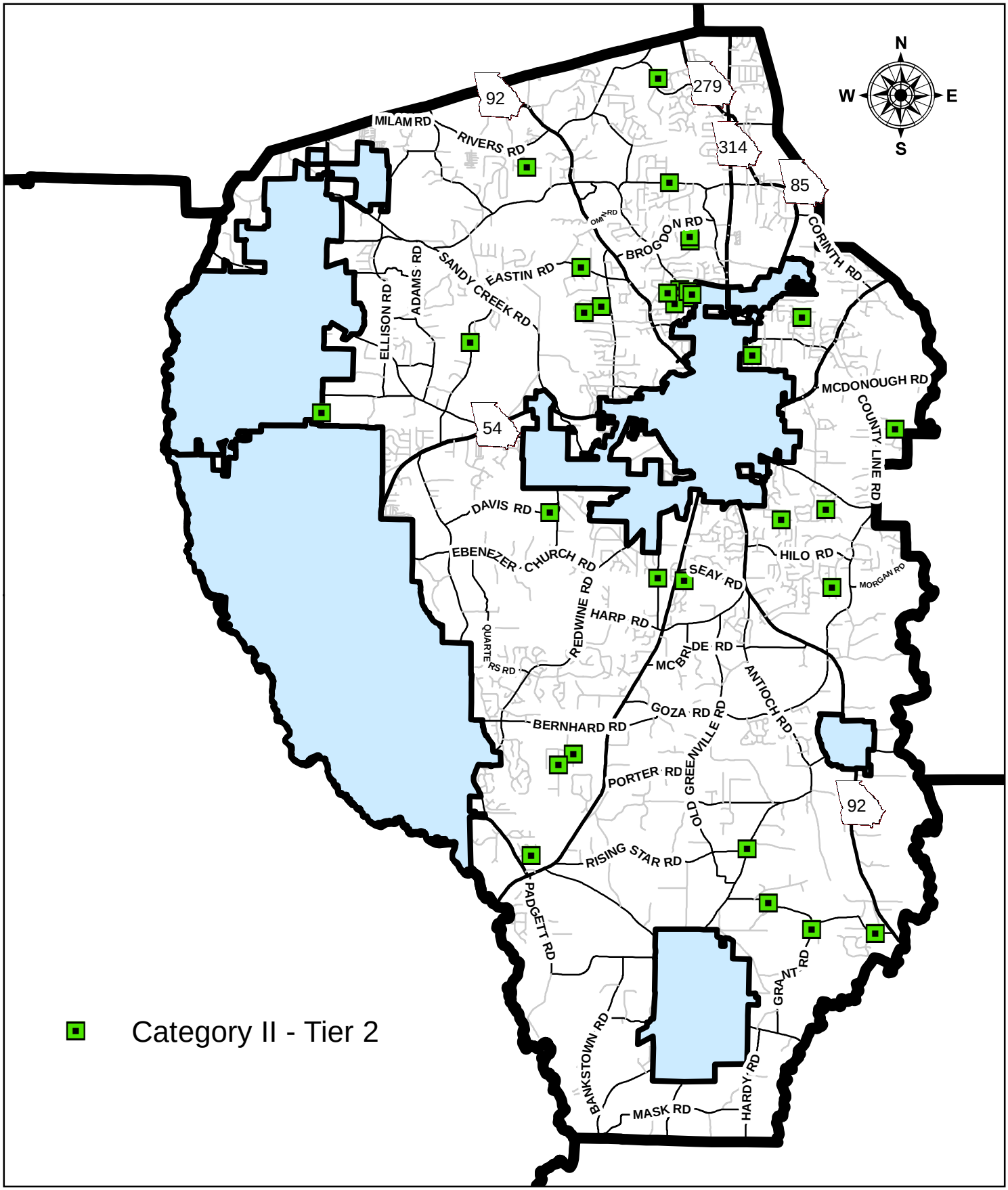
Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.05	$ 20.90
Silt Fence (LF)	$ 5.50	200	$ 1,100.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	45	$ 123.75
Mulch (TN)	$ 286.00	0.5	$ 143.00
Sod (SY)	$ 9.90	350	$ 3,465.00
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00	0	$ -
Erosion Control Total			**$ 6,304.65**
Construction Cost Total			**$ 38,828.56**
Traffic Control (8% of Construction Total $)			**$ 3,106.29**
Construction Cost Grand Total			**$ 41,934.85**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	40	$ 3,960.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	40	$ 2,860.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	40	$ 2,860.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	40	$ 4,400.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 14,080.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	2000	$ 4,000.00
ROW Total			**$ 4,000.00**



CORE INFRASTRUCTURE SPLOST 2013

Draft for Public Comment

CATEGORY II

Project ID	Project Name	Replacement Description	Tier	Cost
	Antebellum Way	dbl 8'x6' RBC, 80'	2	$218,204.75
	Brandon Mill Cir - East	48", RCP, 500' length	2	$192,130.16
	Brandon Mill Cir - North	48", RCP, 250' length	2	$134,992.90
	Brandon Mill Cir - SW	8'x4' RBC, 175'	2	$277,137.90
	Brandon Mill Cir - West	48", RCP, 350' length	2	$157,844.87
	Canterbury Ln	60" RCP	2	$24,671.06
	Coastline Rd	160' prestressed concrete beam bridge	2	$927,761.41
	County Line Court[1]	Drainage System Replacement	2	$175,000.00
	Crabapple Ln	trp 8'x5' RBC, 70'	2	$257,666.67
	Cross Creek Trl	8'x5' RBC, 80'	2	$359,846.13
	Darren Dr	80' prestressed concrete beam bridge	2	$500,910.61
	Davis Rd	five barrell 10'x4', 85'	2	$599,152.07
	Deer Trl	36" RCP	2	$34,882.00
	Deerfield Ln 161	36" RCP	2	$34,050.00
	Deerfield Ln 130	36" RCP	2	$27,421.00
	Downing Ct	4'x3' RBC, 45'	2	$74,056.17
	Flat Creek Trl	trp 10'x4' RBC, 70'	2	$385,063.37
	Grandchester Way	60" RCP	2	$42,141.06
	Grant Rd	60" RCP	2	$41,484.56
	Graves Rd	10'x5' RBC, 70'	2	$226,852.28
	Gristmill Dr	6'x3' RBC, 80'	2	$129,205.63
	Heritage Way - North	48" RCP, 400''	2	$169,270.85
	Heritage Way - South	48" RCP, 200'	2	$122,795.17
	Janice Dr	dbl 6'x4' RBC, 70'	2	$149,564.49
	Kenwood Rd	dbl 8'x5' RBC, 80'	2	$250,571.04
	Lowery Rd and Grant Rd	60" RCP	2	$38,583.06
	Lowery Rd	54" RCP	2	$23,543.16
	Mark Ln	dbl 6'x4' RBC, 90'	2	$179,480.52
	Matthew Way	dbl 9'x4' RBC, 80'	2	$221,144.70
	North Dr	5'x4' RBC, 80'	2	$117,348.58
	Old Senioia Rd	100' prestressed concrete beam bridge	2	$668,572.00
	Ponderosa	48" RCP	2	$25,519.00
	Rising Star/Brooks Woosley[1]	double 10'x6', triple 7'x5'	2	$600,000.00
	Shoal Creek Rd	80' prestressed concrete beam bridge	2	$568,277.00
		Tier 2 Subtotal		**$7,955,144.18**
		TOTAL :		**$11,598,503.97**

[1]Detailed cost estimated to be added upon receipt from engineering firm.

General Information	
Project ID	
Street Name	**Antebellum Way**
Site Visit Date	5/21/13
Road Classification	Internal Local

Project Notes

Urban typical section with curb and gutter along with 4' sidewalk

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 10'
Existing Shld Width (paved and grass) (feet)	None
Existing Side Slopes	2:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	4'
Pipe Type and Size	dbl 7' CMP
Pipe Condition (1-5) (1 is new)	4

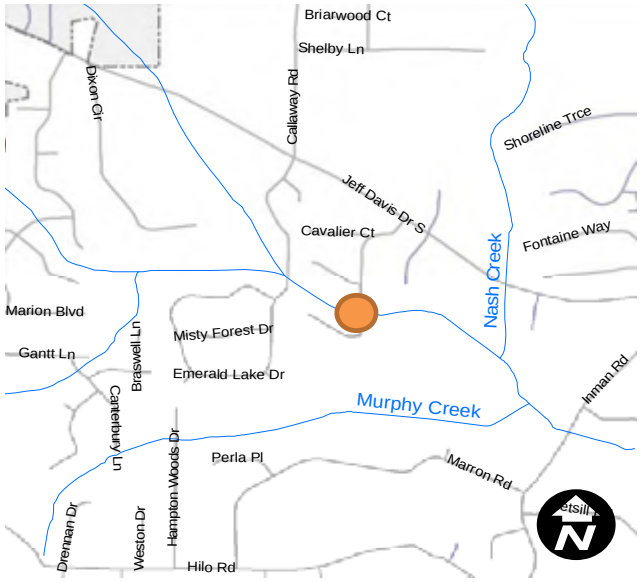
Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	Buried
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	X
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	double 8' x 6' box,concrete, 80' length
Utility Relocations	Electric, cable, phone, gas, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$10,000.00
Utility Relocation Cost		$21,725.00
Construction Cost		$161,479.75
Environmental Permits		$10,000.00
	Total Planning Estimate	**$218,204.75**

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Photo 1:

Photo 2:

Antebellum Way

Photo Date:
7/2/2013
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David King
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Photo 3:

Photo 4:

Antebellum Way

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Photo 5:

Photo 6:

Antebellum Way

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,809.19
Curb and Gutter (LF)	$ 27.50	60	
4" Sidewalk (SY)	$ 49.50	15	
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 1,809.19
Grading Complete (5% of Rwy Items & Drng Total $)			$ 6,931.27
2:01			
Roadway Total			**$ 8,740.46**
4'			

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	159	$ 111,047.53
Steel (lb)		$ 1.38	16334	$ 22,459.25
Type 2 Back Fill (cy)		$ 60.50	54.7	$ 3,309.35
				$ -
Drainage Total				**$ 136,816.13**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.1	$ 41.80
Silt Fence (LF)	$ 5.50	150	$ 825.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	50	$ 137.50
Mulch (TN)	$ 286.00	0.1	$ 28.60
Sod (SY)	$ 9.90	225	$ 2,227.50
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 4,712.40**
Construction Cost Total			**$ 155,268.99**
Traffic Control (4% of Construction Total $)			**$ 6,210.76**
Construction Cost Grand Total			**$ 161,479.75**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	50	$ 4,950.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	50	$ 3,575.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	50	$ 3,575.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00	50	$ 4,125.00
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 21,725.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	5000	**$ 10,000.00**
ROW Total			**$ 10,000.00**

General Information	
Project ID	
Street Name	**Avalon Dr**
Site Visit Date	6/11/2013
Road Classification	Internal Local

Project Notes

Rural typical section

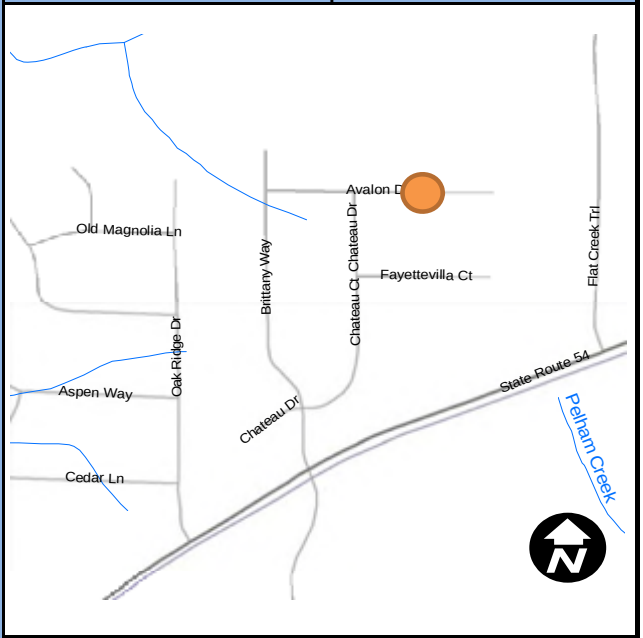
Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 12'
Existing Shld Width (paved and grass) (feet)	4' (Grass)
Existing Side Slopes	flat
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	4
Pipe Type and Size	30", 300' CMP
Pipe Condition (1-5) (1 is new)	3
Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	X

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	None
Water	X
Sewer	None
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	48", RCP, 300' length
Utility Relocations	Water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$7,821.09
Right of Way Cost		$4,000.00
Utility Relocation Cost		$5,500.00
Construction Cost		$78,210.88
Environmental Permits		$10,000.00
	Total Planning Estimate	**$105,531.97**

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Photo 1:

Photo 2:

Avalon Dr

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,809.19
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 1,809.19
Grading Complete (5% of Rwy Items & Drng Total $)			$ 2,918.44
Roadway Total			**$ 4,727.63**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	0	$ -
Steel (lb)		$ 1.38	0	$ -
Type 2 Back Fill (cy)		$ 60.50	67.1	$ 4,059.55
48" RCP		$ 175.00	300	$ 52,500.00
Drainage Total				**$ 56,559.55**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.1	$ 41.80
Silt Fence (LF)	$ 5.50	200	$ 1,100.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	50	$ 137.50
Mulch (TN)	$ 286.00	1.5	$ 429.00
Sod (SY)	$ 9.90	300	$ 2,970.00
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00	0	$ -
Erosion Control Total			**$ 6,130.30**
Construction Cost Total			**$ 72,417.48**
Traffic Control (8% of Construction Total $)			**$ 5,793.40**
Construction Cost Grand Total			**$ 78,210.88**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 5,500.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	2000	$ 4,000.00
ROW Total			**$ 4,000.00**

General Information	
Project ID	
Street Name	**Brandon Mill Cir - East**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Urban typical section with valley gutter,

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-10'
Existing Shld Width (paved and grass) (feet)	4
Existing Side Slopes	flat
Existing Guardrail	none
Depth fm Pavement to Top of Culvert (ft):	4
Pipe Type and Size	48" CMP
Pipe Condition (1-5) (1 is new)	3

Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	

Map

Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes: Close roadway;

Proposed Design

Roadway Section	
Culvert Size & Material	48", RCP, 500' length
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$12,793.65
Right of Way Cost		$15,000.00
Utility Relocation Cost		$26,400.00
Construction Cost		$127,936.51
Environmental Permits		$10,000.00
	Total Planning Estimate	**$192,130.16**

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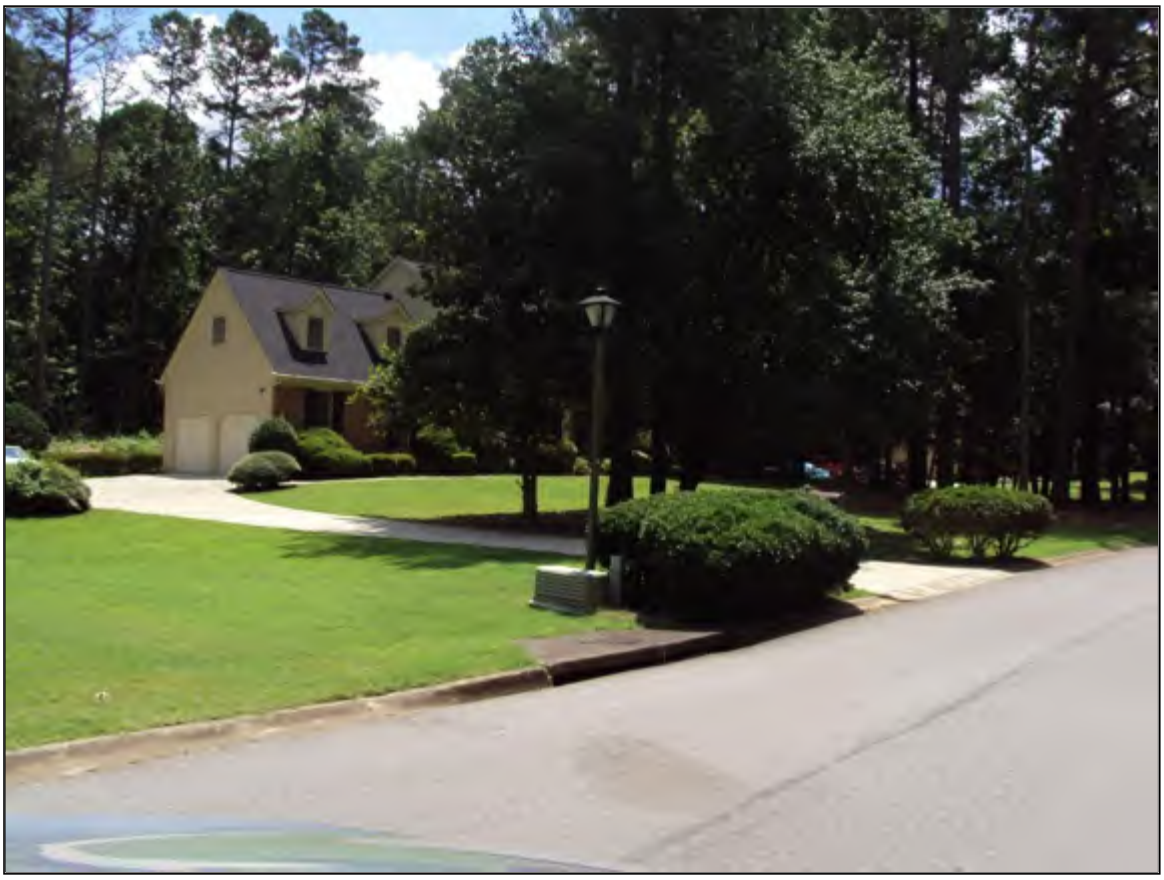

Photo 1:

Photo 2:

Brandon Mill Cir - East

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,809.19
Curb and Gutter (LF)	$ 27.50	50	$ 1,375.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 3,184.19
Grading Complete (5% of Rwy Items & Drng Total $)			$ 4,871.80
Roadway Total			**$ 8,055.99**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	0.00	$ -
Steel (lb)		$ 1.38	0.00	$ -
Type 2 Back Fill (cy)		$ 60.50	111.60	$ 6,751.80
48" RCP		$ 175.00	500.00	$ 87,500.00
Drainage Total				**$ 94,251.80**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			
Signing and Marking Total			**$ -**

Staging	Installation	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.6	$ 250.80
Silt Fence (LF)	$ 5.50	400	$ 2,200.00
Check Dam Type C Silt Fence (LF)	$ 4.40	200	$ 880.00
Erosion Control Mats (SY)	$ 2.75	350	$ 962.50
Mulch (TN)	$ 286.00	5.7	$ 1,630.20
Sod (SY)	$ 9.90	650	$ 6,435.00
Rip Rap (SY)	$ 66.00	30	$ 1,980.00
Plastic Filter Fabric (SY)	$ 6.60	30	$ 198.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 14,536.50**
Construction Cost Total			**$ 121,844.29**
Traffic Control (5% of Construction Total $)			**$ 6,092.21**
Construction Cost Grand Total			**$ 127,936.51**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	75	$ 7,425.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	75	$ 8,250.00
Sewer				
12" main	$ 16.50	$ 75.00	0	$ -
Utility Relocation Total				**$ 26,400.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	7500	$ 15,000.00
ROW Total			**$ 15,000.00**

General Information	
Project ID	
Street Name	**Brandon Mill Cir - North**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Urban typical section with valley gutter,

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-10'
Existing Shld Width (paved and grass) (feet)	4
Existing Side Slopes	flat
Existing Guardrail	none
Depth fm Pavement to Top of Culvert (ft):	4
Pipe Type and Size	48" CMP
Pipe Condition (1-5) (1 is new)	3

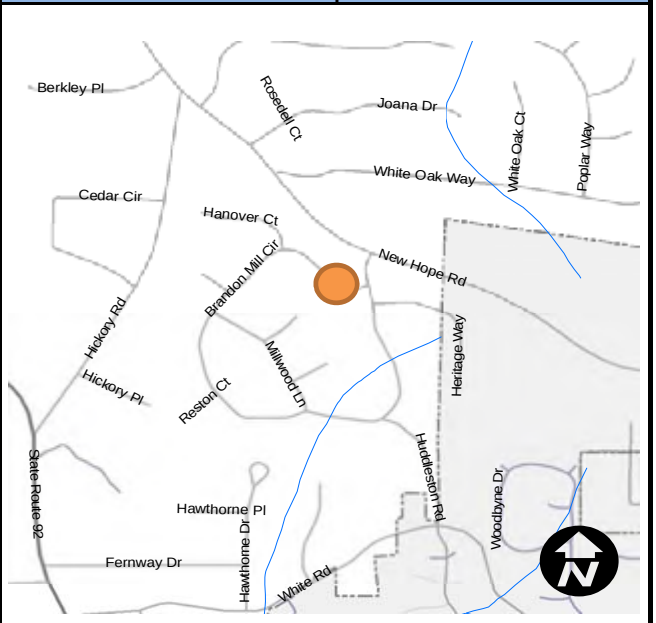
Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes: Close roadway;

Proposed Design

Roadway Section	
Culvert Size & Material	48", RCP, 250' length
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$7,599.35
Right of Way Cost		$15,000.00
Utility Relocation Cost		$26,400.00
Construction Cost		$75,993.54
Environmental Permits		$10,000.00
	Total Planning Estimate	**$134,992.90**

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Photo 2:

Brandon Mill Cir - North

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,809.19
Curb and Gutter (LF)	$ 27.50	50	$ 1,375.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 3,184.19
Grading Complete (5% of Rwy Items & Drng Total $)			$ 2,516.11
Roadway Total			**$ 5,700.30**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	0.00	$ -
Steel (lb)		$ 1.38	0.00	$ -
Type 2 Back Fill (cy)		$ 60.50	56.00	$ 3,388.00
48" RCP		$ 175.00	250.00	$ 43,750.00
Drainage Total				**$ 47,138.00**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			
Signing and Marking Total			**$ -**

Staging	Installation	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.6	$ 250.80
Silt Fence (LF)	$ 5.50	400	$ 2,200.00
Check Dam Type C Silt Fence (LF)	$ 4.40	200	$ 880.00
Erosion Control Mats (SY)	$ 2.75	350	$ 962.50
Mulch (TN)	$ 286.00	5.7	$ 1,630.20
Sod (SY)	$ 9.90	650	$ 6,435.00
Rip Rap (SY)	$ 66.00	30	$ 1,980.00
Plastic Filter Fabric (SY)	$ 6.60	30	$ 198.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 14,536.50**
Construction Cost Total			**$ 72,374.80**
Traffic Control (5% of Construction Total $)			**$ 3,618.74**
Construction Cost Grand Total			**$ 75,993.54**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	75	$ 7,425.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	75	$ 8,250.00
Sewer				
12" main	$ 16.50	$ 75.00	0	$ -
Utility Relocation Total				**$ 26,400.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	7500	$ 15,000.00
ROW Total			**$ 15,000.00**

General Information	
Project ID	
Street Name	**Brandon Mill Cir - SW**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Urban typical section with valley gutter,

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-10'
Existing Shld Width (paved and grass) (feet)	4
Existing Side Slopes	flat
Existing Guardrail	none
Depth fm Pavement to Top of Culvert (ft):	4
Pipe Type and Size	60" CMP
Pipe Condition (1-5) (1 is new)	3

Condition Notes: no headwall upstream or down

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	

Map

Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes: Close roadway;

Proposed Design

Roadway Section	
Culvert Size & Material	8' x 4' box, concrete, 175' length
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
System Evaluation		$25,000.00
Design		$18,248.90
Right of Way Cost		$15,000.00
Utility Relocation Cost		$26,400.00
Construction Cost		$182,489.00
Environmental Permits		$10,000.00
	Total Planning Estimate	**$277,137.90**

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Photo 1:

Photo 2:

Brandon Mill Cir - Southwest

Photo Date:
7/2/2013
Taken By:
David King
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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,809.19
Curb and Gutter (LF)	$ 27.50	50	$ 1,375.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 3,184.19
Grading Complete (5% of Rwy Items & Drng Total $)			$ 7,345.84
Roadway Total			**$ 10,530.03**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	162.36	$ 113,404.97
Steel (lb)		$ 1.38	19170.00	$ 26,358.75
Type 2 Back Fill (cy)		$ 60.50	65.60	$ 3,968.80
Drainage Total				**$ 143,732.52**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			
Signing and Marking Total			**$ -**

Staging	Installation	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.6	$ 250.80
Silt Fence (LF)	$ 5.50	400	$ 2,200.00
Check Dam Type C Silt Fence (LF)	$ 4.40	200	$ 880.00
Erosion Control Mats (SY)	$ 2.75	350	$ 962.50
Mulch (TN)	$ 286.00	5.7	$ 1,630.20
Sod (SY)	$ 9.90	650	$ 6,435.00
Rip Rap (SY)	$ 66.00	30	$ 1,980.00
Plastic Filter Fabric (SY)	$ 6.60	30	$ 198.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 14,536.50**
Construction Cost Total			**$ 173,799.05**
Traffic Control (5% of Construction Total $)			**$ 8,689.95**
Construction Cost Grand Total			**$ 182,489.00**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	75	$ 7,425.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	75	$ 8,250.00
Sewer				
12" main	$ 16.50	$ 75.00	0	$ -
Utility Relocation Total				**$ 26,400.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	7500	$ 15,000.00
ROW Total			**$ 15,000.00**

General Information	
Project ID	
Street Name	**Brandon Mill Cir - West**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Urban typical section with valley gutter,

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-10'
Existing Shld Width (paved and grass) (feet)	4
Existing Side Slopes	flat
Existing Guardrail	none
Depth fm Pavement to Top of Culvert (ft):	4
Pipe Type and Size	48" CMP
Pipe Condition (1-5) (1 is new)	3

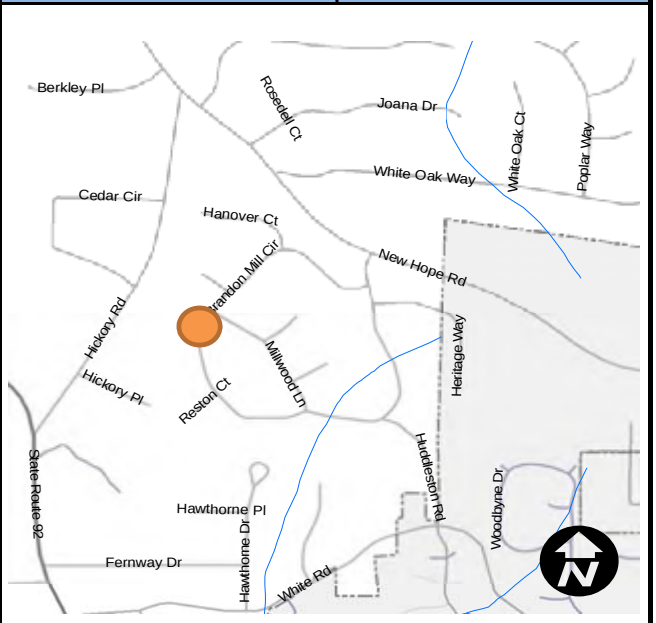
Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes: Close roadway;

Proposed Design

Roadway Section	
Culvert Size & Material	48", RCP, 350' length
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$9,676.81
Right of Way Cost		$15,000.00
Utility Relocation Cost		$26,400.00
Construction Cost		$96,768.06
Environmental Permits		$10,000.00
	Total Planning Estimate	**$157,844.87**

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Photo 1:

Photo 2:

Brandon Mill Cir - West

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7/2/2013
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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,809.19
Curb and Gutter (LF)	$ 27.50	50	$ 1,375.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 3,184.19
Grading Complete (5% of Rwy Items & Drng Total $)			$ 3,458.26
Roadway Total			**$ 6,642.46**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	0.00	$ -
Steel (lb)		$ 1.38	0.00	$ -
Type 2 Back Fill (cy)		$ 60.50	78.20	$ 4,731.10
48" RCP		$ 175.00	350.00	$ 61,250.00
Drainage Total				**$ 65,981.10**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			
Signing and Marking Total			**$ -**

Staging	Installation	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.6	$ 250.80
Silt Fence (LF)	$ 5.50	400	$ 2,200.00
Check Dam Type C Silt Fence (LF)	$ 4.40	200	$ 880.00
Erosion Control Mats (SY)	$ 2.75	350	$ 962.50
Mulch (TN)	$ 286.00	5.7	$ 1,630.20
Sod (SY)	$ 9.90	650	$ 6,435.00
Rip Rap (SY)	$ 66.00	30	$ 1,980.00
Plastic Filter Fabric (SY)	$ 6.60	30	$ 198.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 14,536.50**
Construction Cost Total			**$ 92,160.06**
Traffic Control (5% of Construction Total $)			**$ 4,608.00**
Construction Cost Grand Total			**$ 96,768.06**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	75	$ 7,425.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	75	$ 8,250.00
Sewer				
12" main	$ 16.50	$ 75.00	0	$ -
Utility Relocation Total				**$ 26,400.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	7500	$ 15,000.00
ROW Total			**$ 15,000.00**

General Information	
Project ID	
Street Name	105 Canterbury Lane
Site Visit Date	5-8-2013
Road Classification	Internal Local

Project Notes

Urban typical section without curb and gutter

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12 ft
Existing Shld Width (paved and grass) (feet)	2
Existing Side Slopes	4:1
Existing Guardrail	no
Depth fm Pavement to Top of Culvert (ft):	
Pipe Type and Size	60 CMP
Pipe Condition (1-5) (1 is new)	4

Condition Notes: Inverts rusted thru, severe corrosion of pipe bottom

Pavement Type/Condition	

Environmental Features	
Wetlands	
Ditches	
	STREAM

Utilities (Visual Inspection)	
Electric	YES
Cable	YES
Phone	YES
Gas	UNKNOWN
Water	YES
Sewer	NO
Other	

Map

Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	Typical subdivision without curb and gutter
Culvert Size & Material	Replace with 60 in. diameter RCP and add headwalls
Utility Relocations	As needed
Guardrail Replacement	no
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design	Preliminary complete/finish in-house	
Right of Way Cost		
Utility Relocation Cost	Within ROW/not reimbursable	
Construction Cost	see estimate sheet	24,671.00
Environmental Permits	none expected	
	Total Planning Estimate	$24,671.00

105 Canterbury Lane

BY: VTB
DATE: 7/3/13

ITEM	UNIT	PROJ QUAN	MATERIAL COST UNIT COST	TOTAL
Mobilization	lump	1	0.00	0.00
Traffic Control	lump	1	50.00	50.00
Temp. Silt fence	lf	100	17.31	1731.00
		0		
New Drainage System:				
60" RCP	lf	60	83.50	5010.00
Foundation backfill	ton	220	7.50	1650.00
HW PIP	cy	27	91.00	2457.00
Wall forms	ea	2.00	250.00	500.00
#57 Stone - Half-way up pipe	CY	75.00	12.00	900.00
Repair Road:				
Saw cut asphalt	lf	40	0.50	20.00
Asphalt 9.5 mm Superpave 3.5"	ton	10.30	47.00	484.10
GAB 12"	ton	18	7.50	135.00
Equipment:				
Dump truck	hrs	32	43.00	1376.00
Flat Bed truck	hrs	32	28.00	896.00
Crew cab pickup	hrs	32	30.00	960.00
Gradall	hrs	16	39.00	624.00
Compactor plate	hrs	16	6.75	108.00
Asphalt Spreader	hrs	8	179.12	1432.96
Asphalt Roller (Lee Boy 400)	hrs	8	12.50	100.00
Labor:				
4 man crew	hrs	60	103.95	6237.00
TOTAL				**$ 24,671.06**

General Information	
Project ID	
Street Name	**Coastline Road**
Site Visit Date	5/22/13
Road Classification	Collector

Project Notes

Rural Typical Section; Fish noted in stream/wetland

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12'
Existing Shld Width (paved and grass) (feet)	6' Grass
Existing Side Slopes	2:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	3
Pipe Type and Size	5-96" CMP
Pipe Condition (1-5) (1 is new)	4

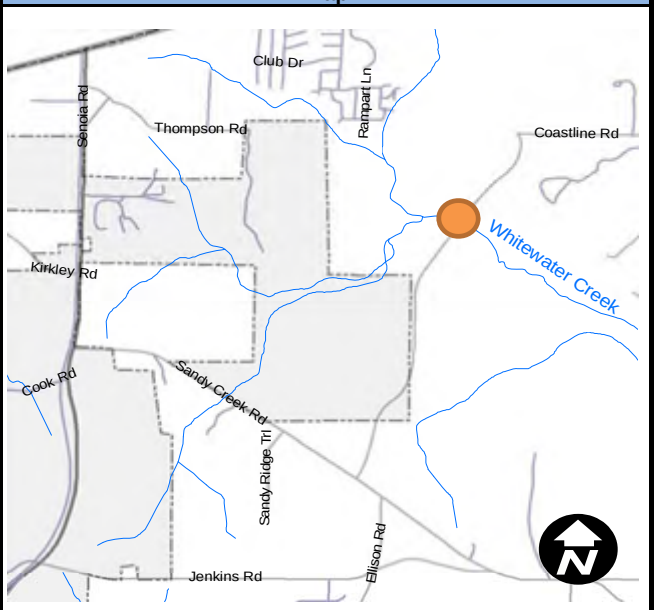
Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	Upstream
Ditches	X

Utilities (Visual Inspection)	
Electric	Aerial
Cable	None
Phone	Aerial
Gas	None
Water	None
Sewer	None
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Relocate if road cannot be closed

Proposed Design

Roadway Section	
Proposed Design	160' prestressed concrete beam bridge, 43' wide - profile elevation raise likely required for the bridge option
Utility Relocations	Electric, phone
Guardrail Replacement	Need to add guardrail due to sideslopes and culvert installation
Miscellaneous Features	Zone AE with Floodway, Floodplain Analysis Required

Planning Cost Estimate

Type	Notes	Total
Design	bridge design and geotech (BFI) included	$80,176.04
Right of Way Cost		$9,000.00
Utility Relocation Cost		$11,825.00
Construction Cost		$801,760.38
Environmental Permits	Permits, Floodplain Analysis	$25,000.00
	Total Planning Estimate	**$927,761.41**

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Photo 1:

Photo 2:

Coastline Road

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Photo 3:

Photo 4:

Coastline Road

Photo Date:
5/21/2013
Taken By:
David King
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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 6,957.54
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20	600	$ 34,320.00
End Anchorage (EA)	$ 2,530.00	2	$ 5,060.00
Subtotal			$ 46,337.54
Grading Complete (5% of Rwy Items & Drng Total $)			$ 34,996.88
Roadway Total			**$ 81,334.42**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	0	$ -
Steel (lb)		$ 1.38	0	$ -
Type 2 Back Fill (cy)		$ 60.50	0	$ -
Bridge Cost (total)				$ 653,600.00
Drainage Total				$ 653,600.00

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ 500.00
Signing and Marking Total			**$ 500.00**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 10,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.1	$ 41.80
Silt Fence (LF)	$ 5.50	700	$ 3,850.00
Check Dam Type C Silt Fence (LF)	$ 4.40	300	$ 1,320.00
Erosion Control Mats (SY)	$ -		
Mulch (TN)	$ 286.00	1	$ 286.00
Perm Grassing (ac)	$ 9.90	0.05	$ 0.50
Rip Rap (SY)	$ 66.00	75	$ 4,950.00
Plastic Filter Fabric (SY)	$ 6.60	75	$ 495.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 10,943.30**
Construction Cost Total			**$ 756,377.71**
Traffic Control (6% of Construction Total $)			**$ 45,382.66**
Construction Cost Grand Total			**$ 801,760.38**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00	100	$ 6,600.00
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00	2	$ 1,375.00
Phone				
Aerial	$ 11.00	$ 27.50	100	$ 3,850.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	0	$ -
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 11,825.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	4500	**$ 9,000.00**
ROW Total			**$ 9,000.00**

Dam Detail Cost Estimates to be added

General Information	
Project ID	
Street Name	**178 Crabapple Lane**
Site Visit Date	5/22/13
Road Classification	County Local

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 9'-10'
Existing Shld Width (paved and grass) (feet)	None
Existing Side Slopes	1.5:1 to flat
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	1.5' - 2'
Pipe Type and Size	2 - 72" CMP
Pipe Condition (1-5) (1 is new)	3

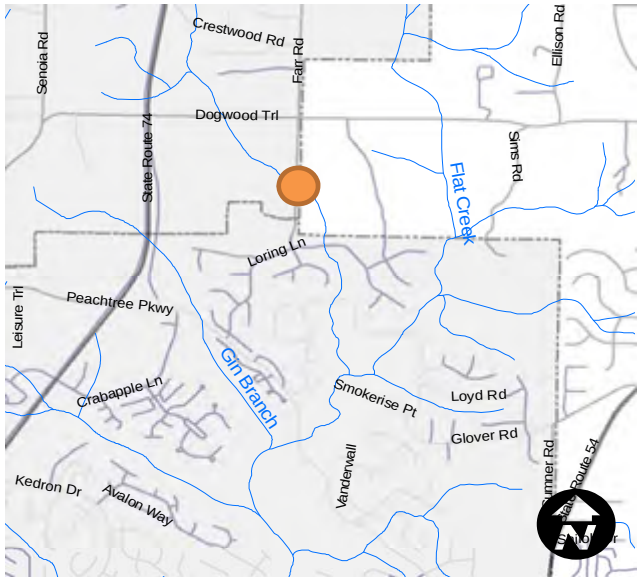
Condition Notes: No Headwall

Pavement Type/Condition	Gravel/Fair

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	
Water	
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	tpl 8' x 5' box, concrete, 70' length
Utility Relocations	Electric, cable, phone
Guardrail Replacement	
Miscellaneous Features	Zone A, Floodplain Analysis Required

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$12,000.00
Utility Relocation Cost		$15,675.00
Construction Cost		$199,990.67
Environmental Permits	Permits, Floodplain Analysis	$15,000.00
	Total Planning Estimate	**$257,665.67**

Fayette County

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Photo 1:

Photo 2:

Crabapple Lane

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Photo 3:

Photo 4:

Crabapple Lane

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5/21/2013
Taken By:
David King
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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 3,666.67
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 3,666.67
Grading Complete (5% of Rwy Items & Drng Total $)			$ 8,322.30
Roadway Total			**$ 11,988.97**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	185	$ 129,557.78
Steel (lb)		$ 1.38	21112	$ 29,029.00
Type 2 Back Fill (cy)		$ 60.50	69.3	$ 4,192.65
Drainage Total				**$ 162,779.43**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 10,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.075	$ 31.35
Silt Fence (LF)	$ 5.50	200	$ 1,100.00
Check Dam Type C Silt Fence (LF)	$ 4.40	150	$ 660.00
Erosion Control Mats (SY)	$ 2.75	45	$ 123.75
Mulch (TN)	$ 286.00	0.6	$ 171.60
Perm Grassing (ac)	$ 9.90	0.035	$ 0.35
Rip Rap (SY)	$ 66.00	25	$ 1,650.00
Plastic Filter Fabric (SY)	$ 6.60	25	$ 165.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 3,902.05**
Construction Cost Total			**$ 188,670.45**
Traffic Control (6% of Construction Total $)			**$ 11,320.23**
Construction Cost Grand Total			**$ 199,990.67**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00	100	$ 6,600.00
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00	2	$ 1,375.00
Phone				
Aerial	$ 11.00	$ 27.50	100	$ 3,850.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50	100	$ 3,850.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	0	$ -
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 15,675.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Fee Simple	4	3000	**$ 12,000.00**
ROW Total			**$ 12,000.00**

General Information	
Project ID	
Street Name	**Cross Creek Trail**
Site Visit Date	5/21/13
Road Classification	Internal Local

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 12'
Existing Shld Width (paved and grass) (feet)	4' (Grass)
Existing Side Slopes	6:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	3
Pipe Type and Size	4 - 72" CMP
Pipe Condition (1-5) (1 is new)	4

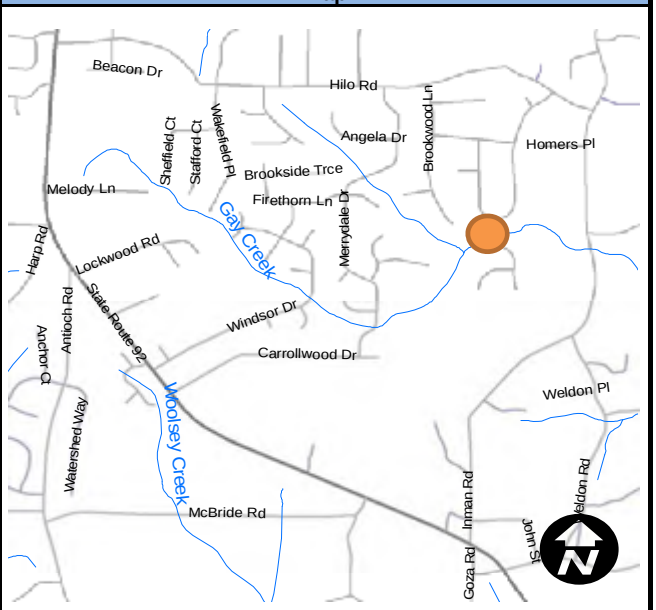
Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	X

Stage Construction Notes:

Proposed Design

Roadway Section	In kind replace
Culvert Size & Material	quad 8' x 5' box, concrete, 80' length
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$29,658.74
Right of Way Cost		$6,000.00
Utility Relocation Cost		$17,600.00
Construction Cost		$296,587.39
Environmental Permits		$10,000.00
	Total Planning Estimate	**$359,846.13**

Fayette County

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Photo 1:

Photo 2:

Cross Creek Trail

Photo Date:
5/21/2013
Taken By:
David King
Page:
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Photo 3:

Photo 4:

Cross Creek Trail

Photo Date:
5/21/2013
Taken By:
David King
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Photo 5:

Photo 6:

Cross Creek Trail

Photo Date:
5/21/2013
Taken By:
David King
Page:
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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 3,618.39
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 3,618.39
Grading Complete (5% of Rwy Items & Drng Total $)			$ 12,295.10
Roadway Total			**$ 15,913.49**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	279	$ 194,588.13
Steel (lb)		$ 1.38	29610	$ 40,713.75
Type 2 Back Fill (cy)		$ 60.50	115.4	$ 6,981.70
Drainage Total				**$ 242,283.58**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ 6,030.65
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 16,030.65**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.5	$ 209.00
Silt Fence (LF)	$ 5.50	625	$ 3,437.50
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	250	$ 687.50
Mulch (TN)	$ 286.00	4.75	$ 1,358.50
Perm Grassing (ac)	$ 9.90	0.3	$ 2.97
Rip Rap (SY)	$ 66.00	35	$ 2,310.00
Plastic Filter Fabric (SY)	$ 6.60	35	$ 231.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 8,236.47**
Construction Cost Total			**$ 282,464.19**
Traffic Control (5% of Construction Total $)			**$ 14,123.21**
Construction Cost Grand Total			**$ 296,587.39**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00	75	$ 4,950.00
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00	2	$ 1,375.00
Phone				
Aerial	$ 11.00	$ 27.50	75	$ 2,887.50
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50	75	$ 2,887.50
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 17,600.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	3000	$ 6,000.00
ROW Total			**$ 6,000.00**

General Information	
Project ID	
Street Name	Darren Drive
Site Visit Date	5/8/2013
Road Classification	Internal Local

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-10 ft
Existing Shld Width (paved and grass) (feet)	2 ft.
Existing Side Slopes	2:1
Existing Guardrail	none
Depth fm Pavement to Top of Culvert (ft):	3
Pipe Type and Size	3 96 in. diameter CMP
Pipe Condition (1-5) (1 is new)	3

Condition Notes:

Pavement Type/Condition	

Environmental Features	
Wetlands	none
Ditches	none
STREAM	

Utilities (Visual Inspection)	
Electric	yes
Cable	yes
Phone	yes
Gas	Unknown
Water	yes
Sewer	no
Other	

Map

Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	x

Stage Construction Notes:

Proposed Design

Roadway Section	Replace in kind
Culvert Size & Material	80 ft. prestressed concrete beam bridge, 43 ft wide
Utility Relocations	as needed
Guardrail Replacement	guardrail may be needed based on culvert lenght
Miscellaneous Features	Zone A Floodplain Analysis Required

Planning Cost Estimate

Type	Notes	Total
Design	bridge design and geotech (BFI) included	67,365.98
Right of Way Cost		7,500
Utility Relocation Cost	within ROW - non-reimbursable	10, 725
Construction Cost	see estimate sheet	397,319.63
Environmental Permits	Permits, Floodplain Analysis	18,000.00
	Total Planning Estimate	$500,910.61

Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 4,522.99
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 4,522.99
Grading Complete (5% of Rwy Items & Drng Total $)			$ 16,566.15
Roadway Total			**$ 21,089.14**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	0	**$ -**
Steel (lb)		$ 1.38	0	**$ -**
Type 2 Back Fill (cy)		$ 60.50	0	**$ -**
Bridge Cost (total)				$ 326,800.00
Drainage Total				**$ 326,800.00**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ 9,045.97
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 19,045.97**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.35	$ 146.30
Silt Fence (LF)	$ 5.50	400	$ 2,200.00
Check Dam Type C Silt Fence (LF)	$ 4.40	100	$ 440.00
Erosion Control Mats (SY)	$ 2.75	225	$ 618.75
Mulch (TN)	$ 286.00	3	$ 858.00
Perm Grassing (ac)	$ 9.90	0.17	$ 1.68
Rip Rap (SY)	$ 66.00	50	$ 3,300.00
Plastic Filter Fabric (SY)	$ 6.60	50	$ 330.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 7,894.73**
Construction Cost Total			**$ 374,829.84**
Traffic Control (6% of Construction Total $)			**$ 22,489.79**
Construction Cost Grand Total			**$ 397,319.63**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00	0	$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	0	$ -
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 10,725.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	3750	**$ 7,500.00**
ROW Total			**$ 7,500.00**

General Information	
Project ID	
Street Name	**118 Davis Road**
Site Visit Date	5/21/13
Road Classification	Collector

Project Notes

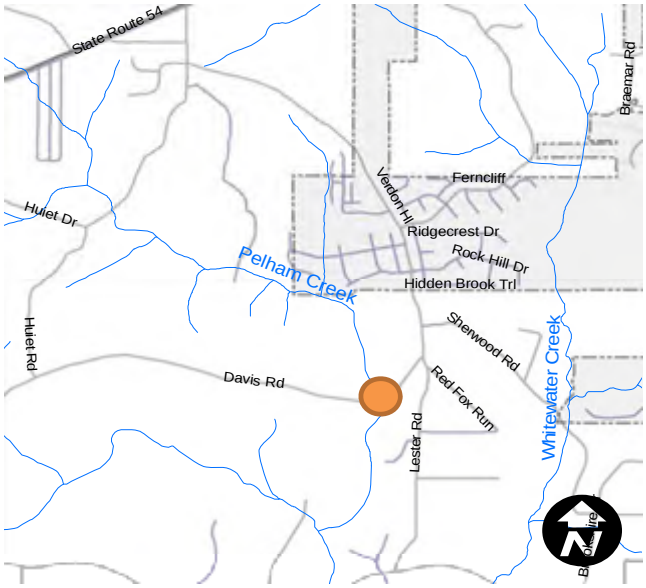
Field Notes

Design (Existing Site Features)	
Existing Road Laneage	1-12'
Existing Shld Width (paved and grass) (feet)	None
Existing Side Slopes	1:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	1
Pipe Type and Size	2-48", 1-24"
Pipe Condition (1-5) (1 is new)	4
Condition Notes:	
Pavement Type/Condition	Gravel/fair

Environmental Features	
Wetlands	Noted
Ditches	None

Utilities (Visual Inspection)	
Electric	
Cable	
Phone	Aerial Crossing
Gas	
Water	
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	
Stage Construction Notes:	

Proposed Design

Roadway Section	
Culvert Size & Material	five-barrel 10' x 4', concrete, 85' length
Utility Relocations	Aerial Phone
Guardrail Replacement	
Miscellaneous Features	Zone A, Floodplain Analysis Required

Planning Cost Estimate

Type	Notes	Total
Design		$47,077.46
Right of Way Cost		$60,000.00
Utility Relocation Cost		$3,300.00
Construction Cost		$470,774.61
Environmental Permits	Permits, Floodplain Analysis	$18,000.00
	Total Planning Estimate	**$599,152.07**

Fayette County

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Photo 1:

Photo 2:

Davis Road

Photo Date:
5/21/2013
Taken By:
David King
Page:
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Photo 3:

Photo 4:

Davis Road

Photo Date:
5/21/2013
Taken By:
David King
Page:
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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,100.00
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 1,100.00
Grading Complete (5% of Rwy Items & Drng Total $)			$ 20,672.71
Roadway Total			**$ 21,772.71**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	471	**$ 329,178.60**
Steel (lb)		$ 1.38	53117	**$ 73,035.88**
Type 2 Back Fill (cy)		$ 60.50	167.6	**$ 10,139.80**
Drainage Total				$ 412,354.28

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 10,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00		
Silt Fence (LF)	$ 5.50		
Check Dam Type C Silt Fence (LF)	$ 4.40		
Erosion Control Mats (SY)	$ 2.75		
Mulch (TN)	$ 286.00		
Sod (SY)	$ 9.90		
Rip Rap (SY)	$ 66.00		
Plastic Filter Fabric (SY)	$ 6.60		
4" Ditch Paving (SY)	$ 33.00		
Erosion Control Total			**$ -**
Construction Cost Total			**$ 444,126.99**
Traffic Control (6% of Construction Total $)			**$ 26,647.62**
Construction Cost Grand Total			**$ 470,774.61**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50	50	$ 1,925.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00	2	$ 1,375.00
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	0	$ -
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 3,300.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Fee Simple	$ 2.00	30000	$ 60,000.00
ROW Total			**$ 60,000.00**

General Information	
Project ID	
Street Name	180 Deer Trail
Site Visit Date	
Road Classification	Internal Local

Project Notes

Storm pipe is metal and over 30 years old and not functioning.

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2
Existing Shld Width (paved and grass) (feet)	NA - curb & gutter
Existing Side Slopes	NA - curb & gutter
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	NA
Pipe Type and Size	CMP, 36-inch Dia.
Pipe Condition (1-5) (1 is new)	4

Condition Notes: Pipe and associated structures are old and in poor condition.

Pavement Type/Condition	average

Environmental Features	
Wetlands	No
Ditches	NA

Utilities (Visual Inspection)	
Electric	Yes
Cable	Yes
Phone	Yes
Gas	Unknown
Water	Yes
Sewer	No
Other	

Map

Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Minimal impacts to traffic and access can be maintained to all properties.

Proposed Design

Roadway Section	Typical subdivision with curb & gutter
Culvert Size & Material	Replace existing pipe with 36-inch RCP, approximately 312 ft.
Utility Relocations	As needed
Guardrail Replacement	None
Miscellaneous Features	Upgrade inlets, headwalls and junction boxes to modern design.

Planning Cost Estimate

Type	Notes	Total
Design	Preliminary complete, finish in-house	0
Right of Way Cost	Easements needed - request donation	$3,000
Utility Relocation Cost	Within ROW - non reimbursable	0
Construction Cost	See estimate sheet	$34,882
Environmental Permits	None expected	0
	Total Planning Estimate	$34,882

180 Deer Trail				BY:	BDK	
				DATE:	7/2/13	
				PROJ	MATERIAL COST	
ITEM	UNIT	QUAN	Infl	QUAN	UNIT	
					COST	TOTAL
Mobilizatio	lump	1	0%	1	0.00	0.00
Traffic Cor	lump	1	0%	1	50.00	50.00
Temp. Silt	lf	150	0%	150	3.50	525.00
			0%	0		0.00
New Drainage System:			0%	0		0.00
36" RCP	lf	312	0%	312	34.00	10608.00
36" HW	ea	2	0%	2	470.00	940.00
Catch Bas	ea	2	0%	2	4000.00	8000.00
Foundatior	ton	309	0%	309	7.50	2317.50
			0%	0		0.00
Repair Road:			0%	0		0.00
Saw cut as	lf	80	0%	80	0.50	40.00
Asphalt 9.5	ton	10.3		10.30	47.00	484.10
GAB 12"	ton	36	0%	36	7.50	270.00
24" Rollba	lf	40	0%	40	20.00	800.00
			0%	0		0.00
Landscapi	lump	1	0%	1	2000.00	2000.00
			0%	0.00		0.00
Equipment:			0%	0.00		0.00
Dump truc	hrs	24	0%	24.00	43.00	1032.00
Flat Bed tr	hrs	24	0%	24.00	28.00	672.00
Crew cab	hrs	24	0%	24.00	30.00	720.00
Gradall	hrs	16	0%	16.00	39.00	624.00
Compactor	hrs	16	0%	16.00	6.75	108.00
Asphalt Sp	hrs	8	0%	8.00	179.12	1432.96
Asphalt Rc	hrs	8	0%	8.00	12.50	100.00
			0%	0.00		0.00
Labor:			0%	0.00		0.00
4 man crev	hrs	40	0%	40.00	103.95	4158.00
			0%	0.00		0.00
			0%	0.00		0.00
			0%	0.00		0.00
						$34,882

General Information	
Project ID	
Street Name	161 Deerfield Lane
Site Visit Date	
Road Classification	Internal Local

Project Notes

Storm pipe in Beverly Manor subdivision is metal and over 30 years old. Typical catch basin construction does not allow for inspection or maintenance. Many junction boxes are masonry block and in poor condition.

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2
Existing Shld Width (paved and grass) (feet)	NA - curb & gutter
Existing Side Slopes	NA - curb & gutter
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	NA
Pipe Type and Size	CMP, 30-inch Dia.
Pipe Condition (1-5) (1 is new)	5

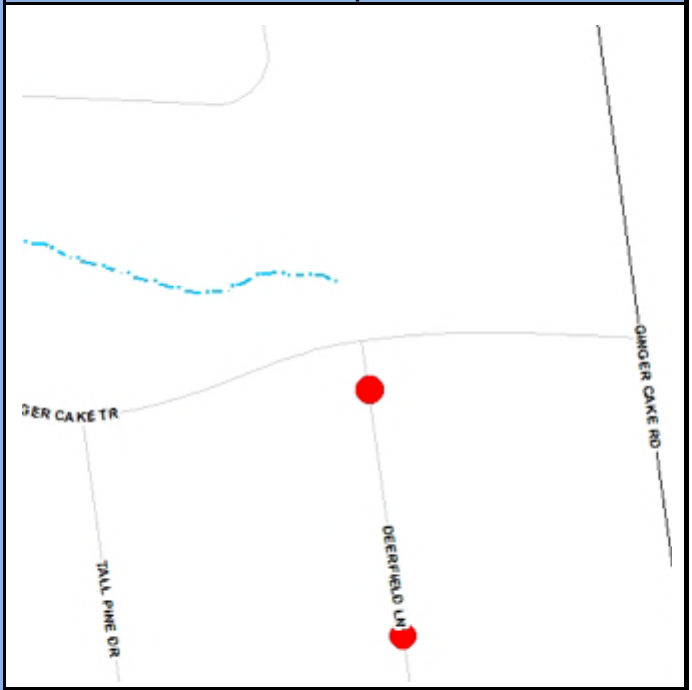
Condition Notes: Pipe and associated structures are old and in poor condition.

Pavement Type/Condition	average

Environmental Features	
Wetlands	No
Ditches	NA

Utilities (Visual Inspection)	
Electric	Yes
Cable	Yes
Phone	Yes
Gas	Unknown
Water	Yes
Sewer	No
Other	

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Minimal impacts to traffic and access can be maintained to all properties.

Proposed Design

Roadway Section	Typical subdivision with curb & gutter
Culvert Size & Material	Replace existing pipe with 30-inch RCP, approximately 64 ft.
Utility Relocations	As needed
Guardrail Replacement	None
Miscellaneous Features	Upgrade inlets, headwalls and junction boxes to modern design.

Planning Cost Estimate

Type	Notes	Total
Design	Preliminary complete, finish in-house	0
Right of Way Cost	Easements needed - request donation	
Utility Relocation Cost	Within ROW - non reimbursable	0
Construction Cost	See estimate sheet	$34,050
Environmental Permits	None expected	0
	Total Planning Estimate	$34,050

130 Deerfield Lane

BY: ACA
DATE: 7/1/13

ITEM	UNIT	QUAN	Infl	PROJ QUAN	MATERIAL COST UNIT COST	MATERIAL COST TOTAL
Mobilization	lump	1	0%	1	0.00	0.00
Traffic Control	lump	1	0%	1	50.00	50.00
Temp. Silt fence	lf	100	0%	100	3.50	350.00
			0%	0		0.00
New Drainage System:			0%	0		0.00
36" RCP	lf	56	0%	56	34.00	1904.00
36" HW	ea	2	0%	2	470.00	940.00
Catch Basin	ea	2	0%	2	4000.00	8000.00
Foundation backfill	ton	55	0%	55	7.50	412.50
			0%	0		0.00
Repair Road:			0%	0		0.00
Saw cut asphalt	lf	40	0%	40	0.50	20.00
Asphalt 9.5 mm Superpave 3.5"	ton	10.3	0%	10.30	47.00	484.10
GAB 12"	ton	18	0%	18	7.50	135.00
24" Rollback Curb	lf	40	0%	40	20.00	800.00
			0%	0		0.00
Repair Asphalt Driveway: (20 lf)			0%	0		0.00
GAB 4"	ton	10	0%	10.00	7.50	75.00
Asphalt 9.5 mm Superpave 2"	ton	5	0%	5	47.00	235.00
			0%	0		0.00
Grass / Landscaping	lump	1	0%	1	1000.00	1000.00
			0%	0		0.00
Equipment:			0%	0		0.00
Dump truck	hrs	24	0%	24	43.00	1032.00
Flat Bed truck	hrs	24	0%	24	28.00	672.00
Crew cab pickup	hrs	24	0%	24	30.00	720.00
Gradall	hrs	16	0%	16	39.00	624.00
Compactor plate	hrs	16	0%	16	6.75	108.00
Asphalt Spreader	hrs	8	0%	8	179.12	1432.96
Asphalt Roller (Lee Boy 400)	hrs	8	0%	8	12.50	100.00
			0%	0		0.00
Labor:			0%	0		0.00
4 man crew	hrs	32	0%	32	103.95	3326.40
			0%	0		0.00
			0%	0		0.00
						$22,421

General Information	
Project ID	
Street Name	130 Deerfield Lane
Site Visit Date	Beverly Manor S/D
Road Classification	Internal Local

Project Notes

Replace 30-year old CMP with RCP. Provide manhole access to pipe for inspection and maintenance. May impact a driveway. One of several pipe replacement projects in subdivision.

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2
Existing Shld Width (paved and grass) (feet)	NA - curb & gutter
Existing Side Slopes	NA - curb & gutter
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	NA
Pipe Type and Size	CMP, 36-inch Dia.
Pipe Condition (1-5) (1 is new)	5

Condition Notes: Pipe and associated structures are old and in poor condition.

Pavement Type/Condition	average

Environmental Features	
Wetlands	No
Ditches	NA

Utilities (Visual Inspection)	
Electric	Yes
Cable	Yes
Phone	Yes
Gas	Unknown
Water	Yes
Sewer	No
Other	

Map

Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Minimal impacts to traffic and access can be maintained to all properties.

Work may require repair to driveway.

Proposed Design

Roadway Section	Typical subdivision with curb & gutter
Culvert Size & Material	Replace existing pipe with 36-inch RCP, approximately 56 ft.
Utility Relocations	As needed
Guardrail Replacement	None
Miscellaneous Features	Upgrade inlets, headwalls and junction boxes to modern design.

Planning Cost Estimate

Type	Notes	Total
Design	Preliminary complete, finish in-house	0
Right of Way Cost	Easements needed - request donation	$5,000
Utility Relocation Cost	Within ROW - non reimbursable	0
Construction Cost	See estimate sheet	$22,421
Environmental Permits	None expected	0
	Total Planning Estimate	$27,421

130 Deerfield Lane

BY: ACA
DATE: 7/1/13

ITEM	UNIT	QUAN	Infl	PROJ QUAN	MATERIAL COST UNIT COST	MATERIAL COST TOTAL
Mobilization	lump	1	0%	1	0.00	0.00
Traffic Control	lump	1	0%	1	50.00	50.00
Temp. Silt fence	lf	100	0%	100	3.50	350.00
			0%	0		0.00
New Drainage System:			0%	0		0.00
36" RCP	lf	56	0%	56	34.00	1904.00
36" HW	ea	2	0%	2	470.00	940.00
Catch Basin	ea	2	0%	2	4000.00	8000.00
Foundation backfill	ton	55	0%	55	7.50	412.50
			0%	0		0.00
Repair Road:			0%	0		0.00
Saw cut asphalt	lf	40	0%	40	0.50	20.00
Asphalt 9.5 mm Superpave 3.5"	ton	10.3	0%	10.30	47.00	484.10
GAB 12"	ton	18	0%	18	7.50	135.00
24" Rollback Curb	lf	40	0%	40	20.00	800.00
			0%	0		0.00
Repair Asphalt Driveway: (20 lf)			0%	0		0.00
GAB 4"	ton	10	0%	10.00	7.50	75.00
Asphalt 9.5 mm Superpave 2"	ton	5	0%	5	47.00	235.00
			0%	0		0.00
Grass / Landscaping	lump	1	0%	1	1000.00	1000.00
			0%	0		0.00
Equipment:			0%	0		0.00
Dump truck	hrs	24	0%	24	43.00	1032.00
Flat Bed truck	hrs	24	0%	24	28.00	672.00
Crew cab pickup	hrs	24	0%	24	30.00	720.00
Gradall	hrs	16	0%	16	39.00	624.00
Compactor plate	hrs	16	0%	16	6.75	108.00
Asphalt Spreader	hrs	8	0%	8	179.12	1432.96
Asphalt Roller (Lee Boy 400)	hrs	8	0%	8	12.50	100.00
			0%	0		0.00
Labor:			0%	0		0.00
4 man crew	hrs	32	0%	32	103.95	3326.40
			0%	0		0.00
			0%	0		0.00
						$22,421

General Information	
Project ID	
Street Name	**Downing Court**
Site Visit Date	5/21/13
Road Classification	Internal Local

Fayette Co Notes

Rural typical section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 12'
Existing Shld Width (paved and grass) (feet)	4' (Grass)
Existing Side Slopes	6:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	2.00
Pipe Type and Size	36" CMP, 45'
Pipe Condition (1-5) (1 is new)	3

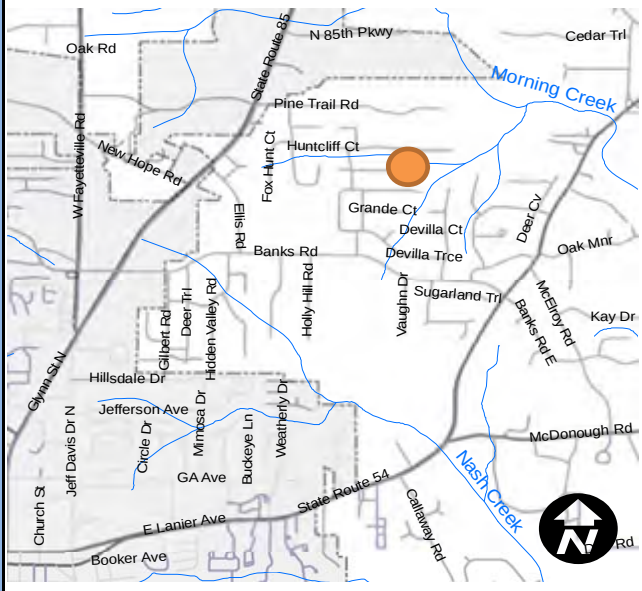
Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	X

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options

Close Location to Traffic	
Maintain One Lane - No Temp Pavement	X
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	4' x 3' box, concrete, 45' length
Utility Relocations	Water
Guardrail Replacement	
Miscellaneous Features	Velocity dissipators and entrance channel need to be included to accommodate hard turn from drainage upstream drainage ditch to culvert. Yard grading for resident on downstream, low side of culvert would

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$7,000.00
Utility Relocation Cost		$5,425.00
Construction Cost		$36,631.17
Environmental Permits		$10,000.00
	Total Planning Estimate	**$74,056.17**

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Photo 1:

Photo 2:

Downing Court

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Photo 3:

Photo 4:

Downing Court

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,809.19
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 1,809.19
Grading Complete (5% of Rwy Items & Drng Total $)			$ 1,115.59
Roadway Total			**$ 2,924.79**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	24	$ 17,060.86
Steel (lb)		$ 1.38	2045.5	$ 2,812.56
Type 2 Back Fill (cy)		$ 60.50	10.4	$ 629.20
Drainage Total				**$ 20,502.63**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			0
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.1	$ 41.80
Silt Fence (LF)	$ 5.50	200	$ 1,100.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	50	$ 137.50
Mulch (TN)	$ 286.00	1.5	$ 429.00
Sod (SY)	$ 9.90	300	$ 2,970.00
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00	0	$ -
Erosion Control Total			**$ 6,130.30**
Construction Cost Total			**$ 34,557.71**
Traffic Control (6% of Construction Total $)			**$ 2,073.46**
Construction Cost Grand Total			**$ 36,631.17**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 10.00	$ 55.00		$ -
Buried	$ 15.00	$ 82.50	0	$ -
Wooden Pole	$ 75.00	$ 605.00		$ -
Phone				
Aerial	$ 10.00	$ 27.50		$ -
Buried	$ 15.00	$ 55.00	0	$ -
Wooden Pole	$ 75.00	$ 605.00		$ -
Cable				
Aerial	$ 10.00	$ 27.50		$ -
Buried	$ 15.00	$ 55.00	0	$ -
Wooden Pole	$ 75.00	$ 605.00		$ -
Gas				
4" main	$ 15.00	$ 66.00		$ -
Water				
8" main	$ 15.00	$ 93.50	50	$ 5,425.00
Sewer				
12" main	$ 15.00	$ 82.50	0	$ -
Utility Relocation Total				**$ 5,425.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	3500	**$ 7,000.00**
ROW Total			**$ 7,000.00**

General Information	
Project ID	
Street Name	**Flat Creek Trail**
Site Visit Date	5/22/13
Road Classification	Collector

Project Notes

Rural typical section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12'
Existing Shld Width (paved and grass) (feet)	None
Existing Side Slopes	1:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	6
Pipe Type and Size (No headwall)	2- 60"x84" (ellip.)
Pipe Condition (1-5) (1 is new)	3

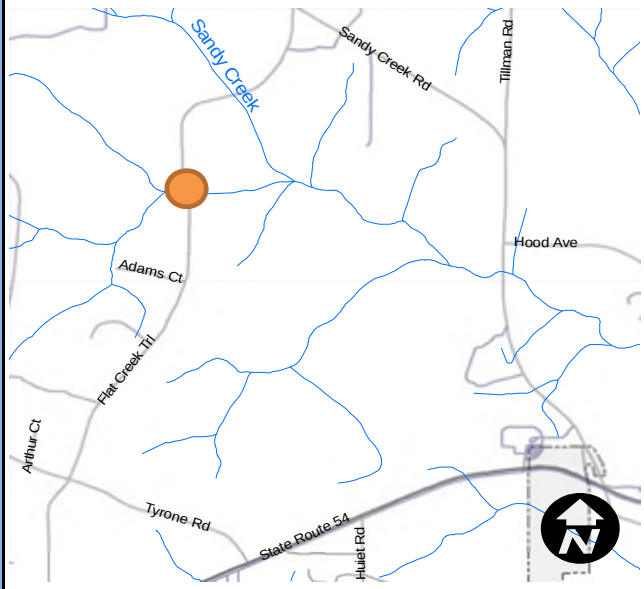
Condition Notes: 2 parallel streams

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	X (upstream)
Ditches	None

Utilities (Visual Inspection)	
Electric	Aerial Crossing
Cable	Aeriel Crossing
Phone	Aerial Crossing
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	triple 10' x 4' box, concrete, 70' length
Utility Relocations	Water
Guardrail Replacement	Need to provide guardrail due to side slopes and culvert installations
Miscellaneous Features	Zone A, Floodplain Analysis Required

Planning Cost Estimate

Type	Notes	Total
Design		$28,551.22
Right of Way Cost		$42,000.00
Utility Relocation Cost		$11,000.00
Construction Cost		$285,512.16
Environmental Permits	Permits, Floodplain Analysis	$18,000.00
	Total Planning Estimate	**$385,063.37**

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Photo 1:

Photo 2:

Flat Creek Trail

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Photo 3:

Photo 4:

Flat Creek Trail

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 5,653.00
Curb and Gutter (LF)	$ 27.50		$ -
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20	600	$ 34,320.00
End Anchorage (EA)	$ 2,530.00	2	$ 5,060.00
Subtotal			$ 45,033.00
Grading Complete (5% of Rwy Items & Drng Total $)			$ 2,276.65
Roadway Total			**$ 47,309.65**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	233	$ 162,422.21
Steel (lb)		$ 1.38	26567	$ 36,529.63
Type 2 Back Fill (cy)		$ 60.50	85.3	$ 5,160.65
Drainage Total				**$ 204,112.48**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ 500.00
Signing and Marking Total			**$ 500.00**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 10,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.11	$ 45.98
Silt Fence (LF)	$ 5.50	400	$ 2,200.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	300	$ 825.00
Mulch (TN)	$ 286.00		$ -
Perm Grassing (ac)	$ 9.90	0.2	$ 1.98
Rip Rap (SY)	$ 66.00	60	$ 3,960.00
Plastic Filter Fabric (SY)	$ 6.60	60	$ 396.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 7,428.96**
Construction Cost Total			**$ 269,351.09**
Traffic Control (6% of Construction Total $)			**$ 16,161.07**
Construction Cost Grand Total			**$ 285,512.16**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	100	$ 11,000.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 11,000.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Fee Simple	$ 4.00	10500	**$ 42,000.00**
ROW Total			**$ 42,000.00**

General Information	
Project ID	
Street Name	250 Grant Road
Site Visit Date	
Road Classification	Arterial

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12 ft
Existing Shld Width (paved and grass) (feet)	2 ft.
Existing Side Slopes	3:1
Existing Guardrail	none
Depth fm Pavement to Top of Culvert (ft):	
Pipe Type and Size	60 in. diameter CMP
Pipe Condition (1-5) (1 is new)	4-5

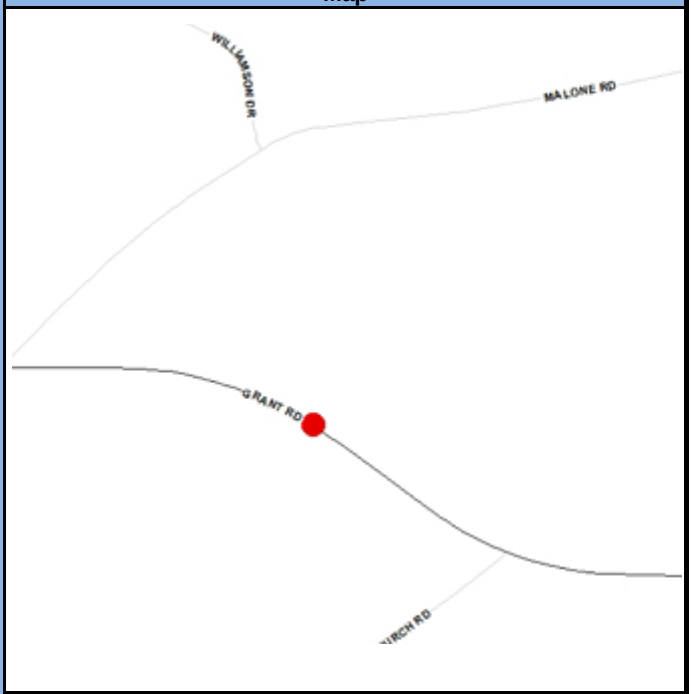
Condition Notes:

Pavement Type/Condition	

Environmental Features	
Wetlands	
Ditches	
STREAM	

Utilities (Visual Inspection)	
Electric	yes
Cable	yes
Phone	yes
Gas	Unknown
Water	yes
Sewer	no
Other	

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

one lane closure

Proposed Design

Roadway Section	
Culvert Size & Material	replace with 60 in. RCP
Utility Relocations	as needed
Guardrail Replacement	no
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design	preliminary complete/finish in-house	
Right of Way Cost		
Utility Relocation Cost	within ROW - non-reimbursable	
Construction Cost	see estimate sheet	$41,484.56
Environmental Permits	none anticipated	
	Total Planning Estimate	$41,484.56

250 Grant Road

BY: VTB
DATE: 7/3/13

ITEM	UNIT	PROJ QUAN	MATERIAL COST UNIT COST	TOTAL
Mobilization	lump	1	0.00	0.00
Traffic Control	lump	1	1000.00	1000.00
Temp. Silt fence	lf	150	17.31	2596.50
		0		
New Drainage System:				
60" RCP	lf	48	83.50	4008.00
Foundation backfill	ton	220	7.50	1650.00
HW PIP	cy	27	91.00	2457.00
Wall forms	ea	2.00	250.00	500.00
#57 Stone - Half-way up pipe	CY	75.00	12.00	900.00
Repair Road:				
Saw cut asphalt	lf	40	0.50	20.00
Asphalt 9.5 mm Superpave 3.5"	ton	10.30	47.00	484.10
GAB 12"	ton	18	7.50	135.00
Grass / Landscaping (sod)	lump	1	1000.00	1000.00
Guardrail	LF	52.0	200.00	10400.00
End Anchorage	lump	2.0	2300.00	4600.00
Equipment:				
Dump truck	hrs	32	43.00	1376.00
Flat Bed truck	hrs	32	28.00	896.00
Crew cab pickup	hrs	32	30.00	960.00
Gradall	hrs	16	39.00	624.00
Compactor plate	hrs	16	6.75	108.00
Asphalt Spreader	hrs	8	179.12	1432.96
Asphalt Roller (Lee Boy 400)	hrs	8	12.50	100.00
Labor:				
4 man crew	hrs	60	103.95	6237.00
TOTAL				$ 41,484.56

General Information	
Project ID	
Street Name	**287 Graves Road**
Site Visit Date	5/22/13
Road Classification	Collector

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12'
Existing Shld Width (paved and grass) (feet)	2'
Existing Side Slopes	2:1 - 4:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	6
Pipe Type and Size	60" CMP
Pipe Condition (1-5) (1 is new)	3

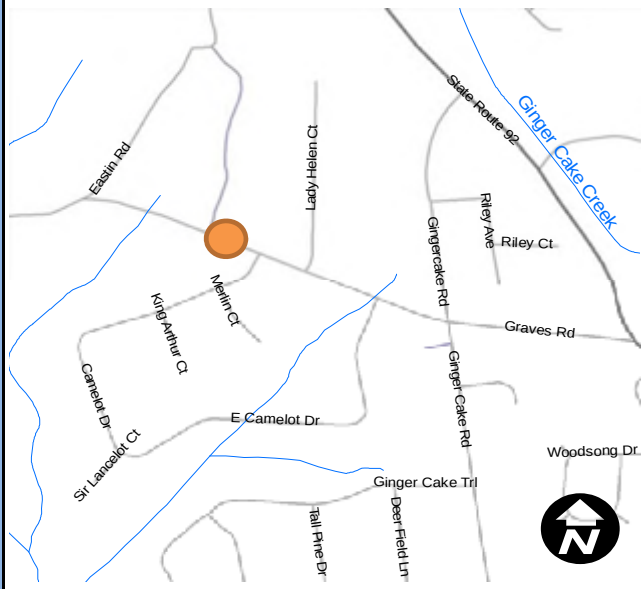
Condition Notes: No headwall; debris US, signs of rusting, DS bottom of pipe damaged, no significant structural loss

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	Noted

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes: If cannot close then have one lane open; two driveways near culvert

Proposed Design

Roadway Section	
Culvert Size & Material	10' x 5' box, concrete, 70' length
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$4,000.00
Utility Relocation Cost		$14,025.00
Construction Cost		$183,827.28
Environmental Permits		$10,000.00
	Total Planning Estimate	**$226,852.28**

Fayette County

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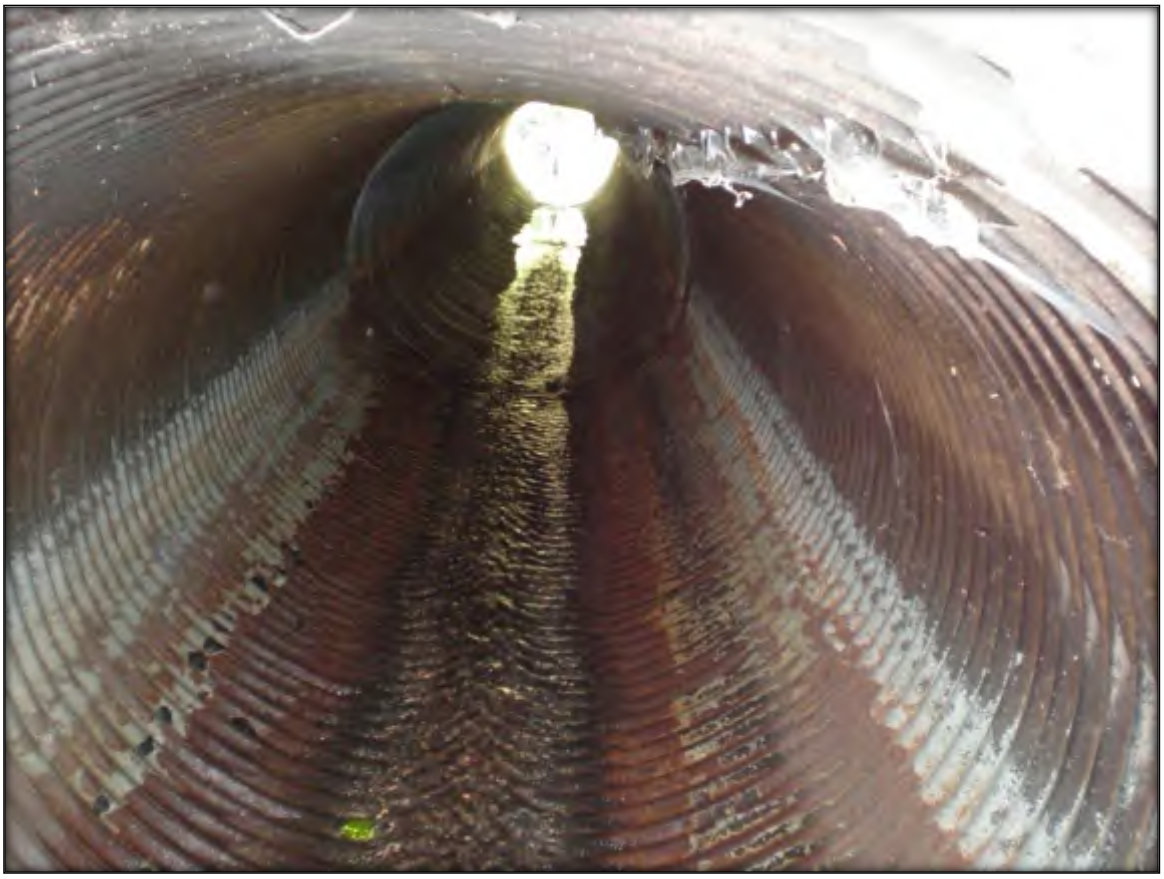

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Graves Road

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Photo 3:

Photo 4:

Graves Road

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 2,174.23
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 2,174.23
Grading Complete (5% of Rwy Items & Drng Total $)			$ 7,458.85
Roadway Total			**$ 9,633.08**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	172	$ 120,323.61
Steel (lb)		$ 1.38	17995	$ 24,743.13
Type 2 Back Fill (cy)		$ 60.50	32	$ 1,936.00
Drainage Total				**$ 147,002.74**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ 500.00
Signing and Marking Total			**$ 500.00**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 10,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.12	$ 50.16
Silt Fence (LF)	$ 5.50	300	$ 1,650.00
Check Dam Type C Silt Fence (LF)	$ 4.40	400	$ 1,760.00
Erosion Control Mats (SY)	$ 2.75	100	$ 275.00
Mulch (TN)	$ 286.00	1.3	$ 371.80
Perm Grassing (ac)	$ 9.90	0.12	$ 1.19
Rip Rap (SY)	$ 66.00	30	$ 1,980.00
Plastic Filter Fabric (SY)	$ 6.60	30	$ 198.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 6,286.15**
Construction Cost Total			**$ 173,421.96**
Traffic Control (6% of Construction Total $)			**$ 10,405.32**
Construction Cost Grand Total			**$ 183,827.28**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00	50	$ 3,300.00
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00	2	$ 1,375.00
Phone				
Aerial	$ 11.00	$ 27.50	50	$ 1,925.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50	50	$ 1,925.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 14,025.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	2000	$ 4,000.00
ROW Total			**$ 4,000.00**

General Information	
Project ID	
Street Name	**110 Gristmill Drive**
Site Visit Date	5/21/13
Road Classification	Internal Local

Project Notes

Urban Typical Section with curb and gutter along sidewlks

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12'
Existing Shld Width (paved and grass) (feet)	grass 6'
Existing Side Slopes	N/A
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	6'
Pipe Type and Size	48"-CMP
Pipe Condition (1-5) (1 is new)	5 (Installation)

Condition Notes: Concrete Headwall at Ends

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	Buried
Water	Buried
Sewer	Buried
Other	

Map

Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	X
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

If replacement with round pipe then phase construction to have at least one lane in each direction at all times

Proposed Design

Roadway Section	Replace urban section w/ sidewalks
Culvert Size & Material	6' x 3' box, concrete, 80' length
Utility Relocations	Electric, cable, phone, gas, water, sewer
Guardrail Replacement	
Miscellaneous Features	Alignment needs to be altered or downstream pipe and grading needs alterations to correct crossing flow paths that has caused downstream pipe cover to be washed away

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$4,000.00
Utility Relocation Cost		$26,675.00
Construction Cost		$73,530.63
Environmental Permits		$10,000.00
	Total Planning Estimate	**$129,205.63**

Fayette County

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Gristmill Drive

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Gristmill Drive

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Photo 5:

Photo 6:

Gristmill Drive

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction		Installation Unit Cost	Amount	Total Cost
Pavement				$ 3,618.39
Curb and Gutter (LF)		$ 27.50	100	$ 2,750.00
4" Sidewalk (SY)	5x50	$ 49.50	30	$ 1,485.00
Guardrail (LF)		$ 57.20		$ -
End Anchorage (EA)		$ 2,530.00		$ -
Subtotal				$ 7,853.39
Grading Complete (5% of Rwy Items & Drng Total $)				$ 2,631.19
Roadway Total				**$ 10,484.58**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	52	$ 36,070.54
Steel (lb)		$ 1.38	5258	$ 7,229.75
Type 2 Back Fill (cy)		$ 60.50	24.3	$ 1,470.15
Drainage Total				**$ 44,770.44**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.25	$ 104.50
Silt Fence (LF)	$ 5.50	250	$ 1,375.00
Check Dam Type C Silt Fence (LF)	$ 4.40	150	$ 660.00
Erosion Control Mats (SY)	$ 2.75	0	$ -
Mulch (TN)	$ 286.00	2	$ 572.00
Sod (SY)	$ 9.90	500	$ 4,950.00
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00	0	$ -
Erosion Control Total			**$ 9,113.50**
Construction Cost Total			**$ 69,368.52**
Traffic Control (6% of Construction Total $)			**$ 4,162.11**
Construction Cost Grand Total			**$ 73,530.63**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	50	$ 4,950.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	50	$ 3,575.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	50	$ 3,575.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00	50	$ 4,125.00
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	50	$ 4,950.00
Utility Relocation Total				**$ 26,675.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	2	2000	$ 4,000.00
ROW Total			**$ 4,000.00**

General Information	
Project ID	
Street Name	**Heritage Way - North**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Urban typical section with valley gutter,

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-10'
Existing Shld Width (paved and grass) (feet)	4
Existing Side Slopes	flat
Existing Guardrail	none
Depth fm Pavement to Top of Culvert (ft):	4
Pipe Type and Size	48" CMP
Pipe Condition (1-5) (1 is new)	3

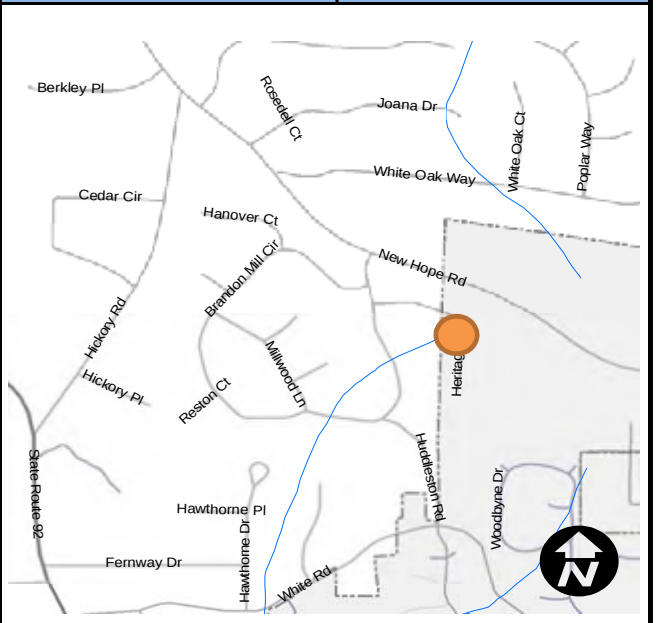
Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes: Close roadway;

Proposed Design

Roadway Section	
Culvert Size & Material	48", RCP, 400' length
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$10,715.53
Right of Way Cost		$15,000.00
Utility Relocation Cost		$26,400.00
Construction Cost		$107,155.32
Environmental Permits		$10,000.00
	Total Planning Estimate	**$169,270.85**

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Photo 1:

Photo 2:

Heritage Way - North

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,809.19
Curb and Gutter (LF)	$ 27.50	50	$ 1,375.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 3,184.19
Grading Complete (5% of Rwy Items & Drng Total $)			$ 3,929.34
Roadway Total			**$ 7,113.54**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	0.00	$ -
Steel (lb)		$ 1.38	0.00	$ -
Type 2 Back Fill (cy)		$ 60.50	89.30	$ 5,402.65
48" RCP		$ 175.00	400.00	$ 70,000.00
Drainage Total				**$ 75,402.65**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			
Signing and Marking Total			**$ -**

Staging	Installation	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.6	$ 250.80
Silt Fence (LF)	$ 5.50	400	$ 2,200.00
Check Dam Type C Silt Fence (LF)	$ 4.40	200	$ 880.00
Erosion Control Mats (SY)	$ 2.75	350	$ 962.50
Mulch (TN)	$ 286.00	5.7	$ 1,630.20
Sod (SY)	$ 9.90	650	$ 6,435.00
Rip Rap (SY)	$ 66.00	30	$ 1,980.00
Plastic Filter Fabric (SY)	$ 6.60	30	$ 198.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 14,536.50**
Construction Cost Total			**$ 102,052.69**
Traffic Control (5% of Construction Total $)			**$ 5,102.63**
Construction Cost Grand Total			**$ 107,155.32**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	75	$ 7,425.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	75	$ 8,250.00
Sewer				
12" main	$ 16.50	$ 75.00	0	$ -
Utility Relocation Total				**$ 26,400.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	7500	$ 15,000.00
ROW Total			**$ 15,000.00**

General Information	
Project ID	
Street Name	**Heritage Way - South**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Urban typical section with valley gutter,

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-10'
Existing Shld Width (paved and grass) (feet)	4
Existing Side Slopes	flat
Existing Guardrail	none
Depth fm Pavement to Top of Culvert (ft):	4
Pipe Type and Size	48" CMP
Pipe Condition (1-5) (1 is new)	3

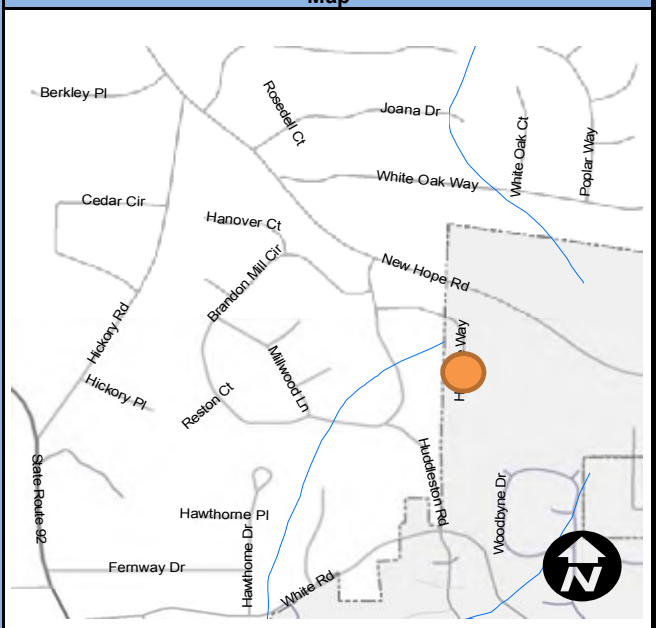
Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes: Close roadway;

Proposed Design

Roadway Section	
Culvert Size & Material	48", RCP, 200' length
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$6,560.63
Right of Way Cost		$15,000.00
Utility Relocation Cost		$26,400.00
Construction Cost		$65,606.29
Environmental Permits		$10,000.00
	Total Planning Estimate	$122,795.17

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Heritage Way - South

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,809.19
Curb and Gutter (LF)	$ 27.50	50	$ 1,375.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 3,184.19
Grading Complete (5% of Rwy Items & Drng Total $)			$ 2,045.03
Roadway Total			**$ 5,229.23**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	0.00	$ -
Steel (lb)		$ 1.38	0.00	$ -
Type 2 Back Fill (cy)		$ 60.50	44.90	$ 2,716.45
48" RCP		$ 175.00	200.00	$ 35,000.00
Drainage Total				**$ 37,716.45**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			
Signing and Marking Total			**$ -**

Staging	Installation	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.6	$ 250.80
Silt Fence (LF)	$ 5.50	400	$ 2,200.00
Check Dam Type C Silt Fence (LF)	$ 4.40	200	$ 880.00
Erosion Control Mats (SY)	$ 2.75	350	$ 962.50
Mulch (TN)	$ 286.00	5.7	$ 1,630.20
Sod (SY)	$ 9.90	650	$ 6,435.00
Rip Rap (SY)	$ 66.00	30	$ 1,980.00
Plastic Filter Fabric (SY)	$ 6.60	30	$ 198.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 14,536.50**
Construction Cost Total			**$ 62,482.18**
Traffic Control (5% of Construction Total $)			**$ 3,124.11**
Construction Cost Grand Total			**$ 65,606.29**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	75	$ 7,425.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	75	$ 8,250.00
Sewer				
12" main	$ 16.50	$ 75.00	0	$ -
Utility Relocation Total				**$ 26,400.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	7500	$ 15,000.00
ROW Total			**$ 15,000.00**

General Information	
Project ID	
Street Name	**510 Janice Drive**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 10'
Existing Shld Width (paved and grass) (feet)	1' (Grass)
Existing Side Slopes	6:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	2
Pipe Type and Size	1 - 60" CMP
Pipe Condition (1-5) (1 is new)	3

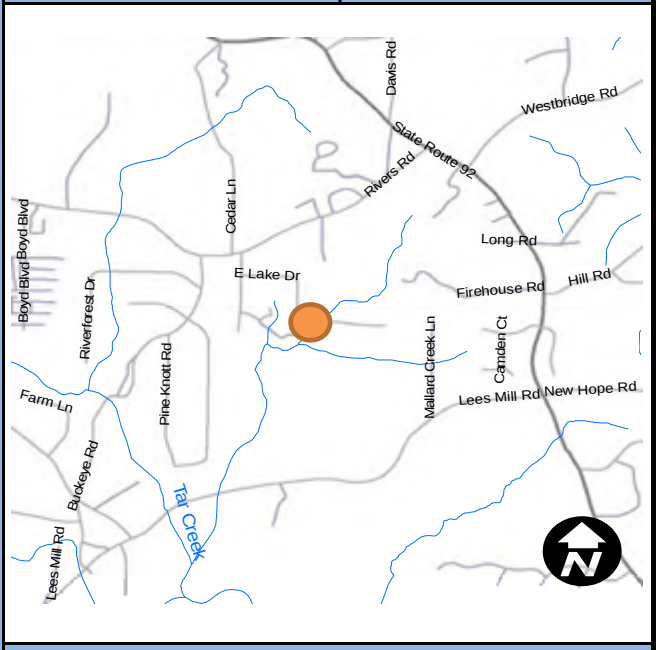
Condition Notes: Signs of rust, but no evidence of structural loss; downstream debris potentially limiting capacity - maintenance to clear debris

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None
2 Streams	

Utilities (Visual Inspection)	
Electric	**Aerial**
Cable	**Aerial**
Phone	**Aerial**
Gas	
Water	**Buried**
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	X
Maintain One Lane - Temp Pavement	

Stage Construction Notes:
Stage Construction to have one lane open

Proposed Design

Roadway Section	
Culvert Size & Material	double 6' x 4' box, concrete, 70' length
Utility Relocations	Water main and possible aerial facility relocation
Guardrail Replacement	
Miscellaneous Features	Zone A, Floodplain Analysis Required

Planning Cost Estimate

Type	Description	Total
Design		$15,000.00
Right of Way Cost		$5,000.00
Utility Relocation Cost		$15,455.00
Construction Cost		$96,109.49
Environmental Permits	Permits, Floodplain Analysis	$18,000.00
	Total Planning Estimate	**$149,564.49**

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Photo 2:

Janice Drive

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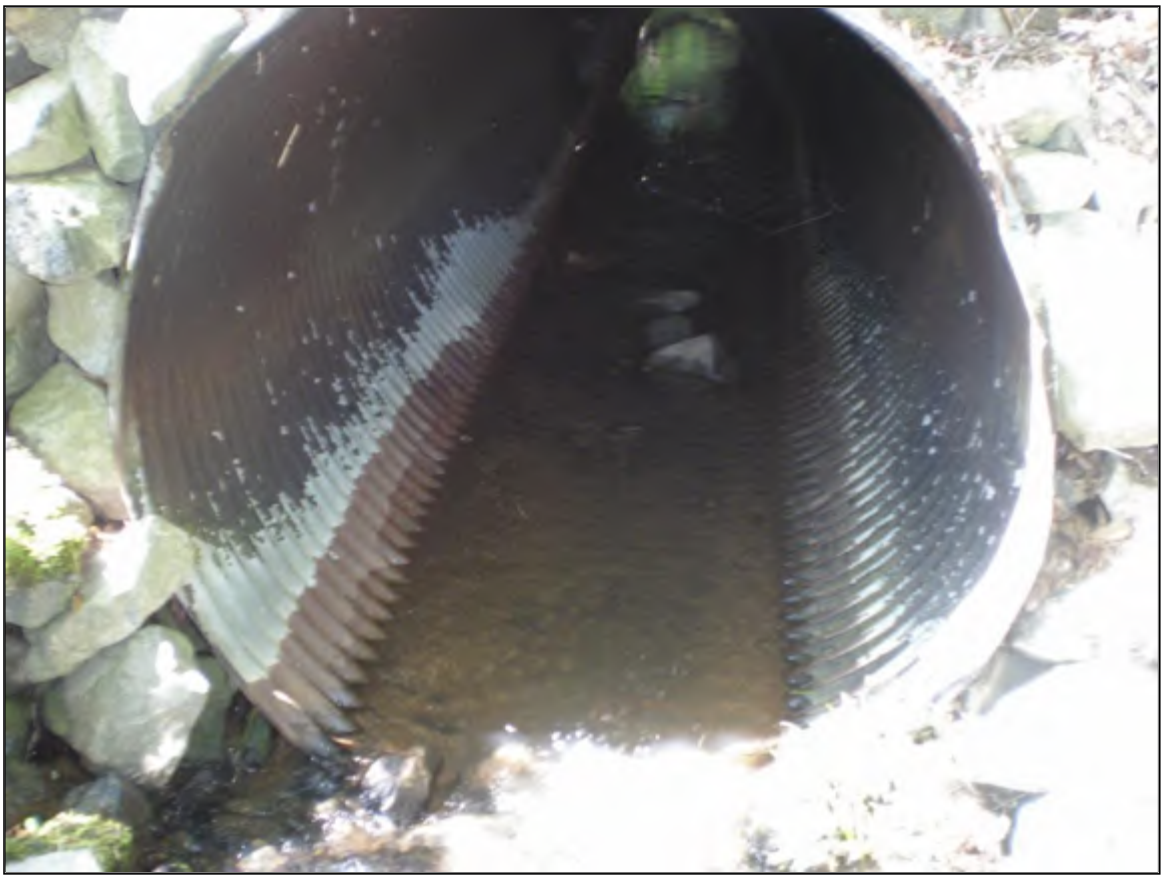

Photo 3:

Photo 4:

Janice Drive

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,809.19
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 1,809.19
Grading Complete (5% of Rwy Items & Drng Total $)			$ 3,852.94
Roadway Total			**$ 5,662.14**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	86	$ 60,406.28
Steel (lb)		$ 1.38	9154	$ 12,586.75
Type 2 Back Fill (cy)		$ 60.50	37.3	$ 2,256.65
Drainage Total				**$ 75,249.68**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 5,000.00	1	$ 5,000.00
Staging Total			**$ 5,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.09	$ 37.62
Silt Fence (LF)	$ 5.50	200	$ 1,100.00
Check Dam Type C Silt Fence (LF)	$ 4.40	200	$ 880.00
Erosion Control Mats (SY)	$ 2.75	100	$ 275.00
Mulch (TN)	$ 286.00	1	$ 286.00
Perm Grassing (ac)	$ 9.90	0.09	$ 0.89
Rip Rap (SY)	$ 66.00	30	$ 1,980.00
Plastic Filter Fabric (SY)	$ 6.60	30	$ 198.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 4,757.51**
Construction Cost Total			**$ 90,669.33**
Traffic Control (6% of Construction Total $)			**$ 5,440.16**
Construction Cost Grand Total			**$ 96,109.49**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00	60	$ 3,960.00
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00	2	$ 1,375.00
Phone				
Aerial	$ 11.00	$ 27.50	60	$ 2,310.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50	60	$ 2,310.00
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 15,455.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	2500	$ 5,000.00
ROW Total			**$ 5,000.00**

General Information	
Project ID	
Street Name	**547 Kenwood Road**
Site Visit Date	5/22/13
Road Classification	Minor Arterial

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12'
Existing Shld Width (paved and grass) (feet)	None
Existing Side Slopes	1:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	2
Pipe Type and Size	96" CMP
Pipe Condition (1-5) (1 is new)	3

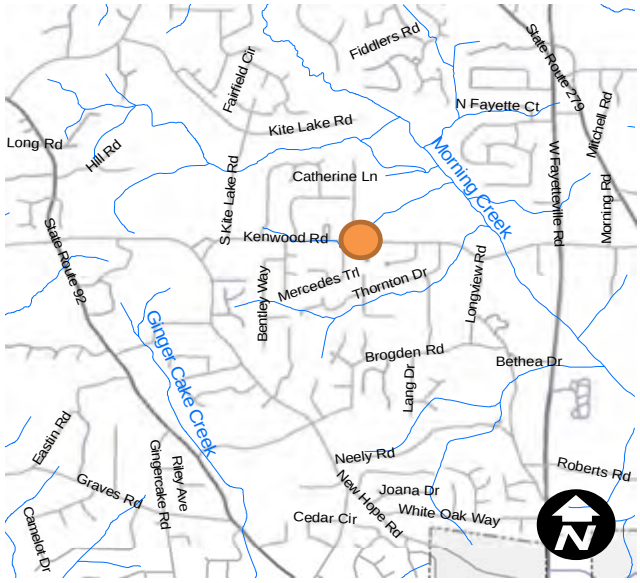
Condition Notes: Rusted severely on upstream and downstream ends; 3' + drop on downstream end, interior structure ok, debris/maintenance needed

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	Noted

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options

Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes: 35 mph posted

Proposed Design

Roadway Section	
Culvert Size & Material	dbl 8' x 5' box, concrete, 80' length
Utility Relocations	
Guardrail Replacement	Guardrail due to culvert and side slopes
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$20,688.28
Right of Way Cost		$7,500.00
Utility Relocation Cost		$5,500.00
Construction Cost		$206,882.77
Environmental Permits		$10,000.00
	Total Planning Estimate	**$250,571.04**

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Kenwood Road

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Photo 3:

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Kenwood Road

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 5,147.82
Curb and Gutter (LF)	$ 27.50		$ -
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20	500	$ 28,600.00
End Anchorage (EA)	$ 2,530.00	2	$ 5,060.00
Subtotal			$ 38,807.82
Grading Complete (5% of Rwy Items & Drng Total $)			$ 8,344.64
Roadway Total			**$ 47,152.46**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	149	$ 103,894.89
Steel (lb)		$ 1.38	15186	$ 20,880.75
Type 2 Back Fill (cy)		$ 60.50	54.7	$ 3,309.35
Drainage Total				**$ 128,084.99**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ 500.00
Signing and Marking Total			**$ 500.00**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 10,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.5	$ 209.00
Silt Fence (LF)	$ 5.50	450	$ 2,475.00
Check Dam Type C Silt Fence (LF)	$ 4.40	300	$ 1,320.00
Erosion Control Mats (SY)	$ 2.75	450	$ 1,237.50
Mulch (TN)	$ 286.00	4.5	$ 1,287.00
Perm Grassing (ac)	$ 9.90	0.25	$ 2.48
Rip Rap (SY)	$ 66.00	40	$ 2,640.00
Plastic Filter Fabric (SY)	$ 6.60	40	$ 264.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 9,434.98**
Construction Cost Total			**$ 195,172.42**
Traffic Control (6% of Construction Total $)			**$ 11,710.35**
Construction Cost Grand Total			**$ 206,882.77**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 5,500.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	3750	$ 7,500.00
ROW Total			**$ 7,500.00**

General Information	
Project ID	
Street Name	Lowery and Grant Road Intersection
Site Visit Date	
Road Classification	Arterial

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12 ft
Existing Shld Width (paved and grass) (feet)	2 ft.
Existing Side Slopes	3:1
Existing Guardrail	none
Depth fm Pavement to Top of Culvert (ft):	
Pipe Type and Size	60 in. diameter CMP
Pipe Condition (1-5) (1 is new)	4-5

Condition Notes:

Pavement Type/Condition	

Environmental Features	
Wetlands	
Ditches	
STREAM	

Utilities (Visual Inspection)	
Electric	yes
Cable	yes
Phone	yes
Gas	Unknown
Water	yes
Sewer	no
Other	

Map

Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

one lane closure

Proposed Design

Roadway Section	
Culvert Size & Material	replace with 60 in. RCP
Utility Relocations	as needed
Guardrail Replacement	no
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design	preliminary complete/finish in-house	
Right of Way Cost		
Utility Relocation Cost	within ROW - non-reimbursable	
Construction Cost	see estimate sheet	$38,583.06
Environmental Permits	none anticipated	
	Total Planning Estimate	$38,583.06

Lowery and Grant Road Intersection BY: VTB
DATE: 7/3/13

ITEM	UNIT	PROJ QUAN	MATERIAL COST UNIT COST	TOTAL
Mobilization	lump	1	0.00	0.00
Traffic Control	lump	1	500.00	500.00
Temp. Silt fence	lf	100	17.31	1731.00
		0		
New Drainage System:				
60" RCP	lf	48	83.50	4008.00
Foundation backfill	ton	220	7.50	1650.00
HW PIP	cy	27	700.00	18900.00
Wall forms	ea	2.00	250.00	500.00
Repair Road:				
Saw cut asphalt	lf	40	0.50	20.00
Asphalt 9.5 mm Superpave 3.5"	ton	10.30	47.00	484.10
GAB 12"	ton	18	7.50	135.00
Grass / Landscaping (sod)	lump	1	1000.00	1000.00
Equipment:				
Dump truck	hrs	32	43.00	1376.00
Flat Bed truck	hrs	32	28.00	896.00
Crew cab pickup	hrs	32	30.00	960.00
Gradall	hrs	16	39.00	624.00
Compactor plate	hrs	16	6.75	108.00
Asphalt Spreader	hrs	8	179.12	1432.96
Asphalt Roller (Lee Boy 400)	hrs	8	12.50	100.00
Labor:				
4 man crew	hrs	40	103.95	4158.00
TOTAL				$ 38,583.06

General Information	
Project ID	
Street Name	177 Lowery Road
Site Visit Date	4/26/2013
Road Classification	Arterial

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-12 ft
Existing Shld Width (paved and grass) (feet)	
Existing Side Slopes	3:1
Existing Guardrail	none
Depth fm Pavement to Top of Culvert (ft):	
Pipe Type and Size	54 in. diameter CMP
Pipe Condition (1-5) (1 is new)	4-5

Condition Notes:

Pavement Type/Condition	

Environmental Features	
Wetlands	
Ditches	
STREAM	

Utilities (Visual Inspection)	
Electric	yes
Cable	yes
Phone	yes
Gas	Unknown
Water	yes
Sewer	no
Other	

Map

Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	replace with 54 in. RCP
Utility Relocations	as needed
Guardrail Replacement	no
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design	preliminary complete/finish in-house	
Right of Way Cost		
Utility Relocation Cost	within ROW - non-reimbursable	
Construction Cost	see estimate sheet	23, 543.16
Environmental Permits	none anticipated	
	Total Planning Estimate	$23,543.16

Lowery and Grant Road Intersection BY: VTB
DATE: 7/3/13

ITEM	UNIT	PROJ QUAN	MATERIAL COST UNIT COST	TOTAL
Mobilization	lump	1	0.00	0.00
Traffic Control	lump	1	500.00	500.00
Temp. Silt fence	lf	100	17.31	1731.00
		0		
New Drainage System:				
60" RCP	lf	48	83.50	4008.00
Foundation backfill	ton	220	7.50	1650.00
HW PIP	cy	27	700.00	18900.00
Wall forms	ea	2.00	250.00	500.00
Repair Road:				
Saw cut asphalt	lf	40	0.50	20.00
Asphalt 9.5 mm Superpave 3.5"	ton	10.30	47.00	484.10
GAB 12"	ton	18	7.50	135.00
Grass / Landscaping (sod)	lump	1	1000.00	1000.00
Equipment:				
Dump truck	hrs	32	43.00	1376.00
Flat Bed truck	hrs	32	28.00	896.00
Crew cab pickup	hrs	32	30.00	960.00
Gradall	hrs	16	39.00	624.00
Compactor plate	hrs	16	6.75	108.00
Asphalt Spreader	hrs	8	179.12	1432.96
Asphalt Roller (Lee Boy 400)	hrs	8	12.50	100.00
Labor:				
4 man crew	hrs	40	103.95	4158.00
TOTAL				$ 38,583.06

General Information	
Project ID	
Street Name	**115 Mark Lane**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Urban typical with Curb and Gutter

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 10'
Existing Shld Width (paved and grass) (feet)	4'
Existing Side Slopes	Flat
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	5
Pipe Type and Size	60" CMP
Pipe Condition (1-5) (1 is new)	4

Condition Notes: Not straight, joint damage; downstream sediment (1/2' of sediment 90' length)

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	X (Upstream)
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	

Map

Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	X
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	Double 6x4' box, concrete, 90'
Utility Relocations	Electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$8,000.00
Utility Relocation Cost		$17,600.00
Construction Cost		$128,880.52
Environmental Permits		$10,000.00
	Total Planning Estimate	**$179,480.52**

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Photo 1:

Photo 2:

Mark Lane

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Photo 3:

Photo 4:

Mark Lane

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 2,412.26
Curb and Gutter (LF)	$ 27.50	80	$ 2,200.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 4,612.26
Grading Complete (5% of Rwy Items & Drng Total $)			$ 4,931.08
Roadway Total			**$ 9,543.34**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	107	$ 75,061
Steel (lb)		$ 1.38	11682	$ 16,063
Type 2 Back Fill (cy)		$ 60.50	47.7	$ 2,886
Drainage Total				**$ 94,009**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 10,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.08	$ 33.44
Silt Fence (LF)	$ 5.50	250	$ 1,375.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	100	$ 275.00
Mulch (TN)	$ 286.00	1.2	$ 343.20
Sod (SY)	$ 9.90	240	$ 2,376.00
Rip Rap (SY)	$ 66.00	50	$ 3,300.00
Plastic Filter Fabric (SY)	$ 6.60	50	$ 330.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 8,032.64**
Construction Cost Total			**$ 121,585.39**
Traffic Control (6% of Construction Total $)			**$ 7,295.12**
Construction Cost Grand Total			**$ 128,880.52**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	50	$ 4,950.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	50	$ 3,575.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	50	$ 3,575.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 17,600.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	4000	$ 8,000.00
ROW Total			**$ 8,000.00**

General Information	
Project ID	
Street Name	**130 Mathew Way**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Urban typical with Curb and Gutter

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-10'
Existing Shld Width (paved and grass) (feet)	6'
Existing Side Slopes	Flat
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	4
Pipe Type and Size	72" CMP
Pipe Condition (1-5) (1 is new)	4

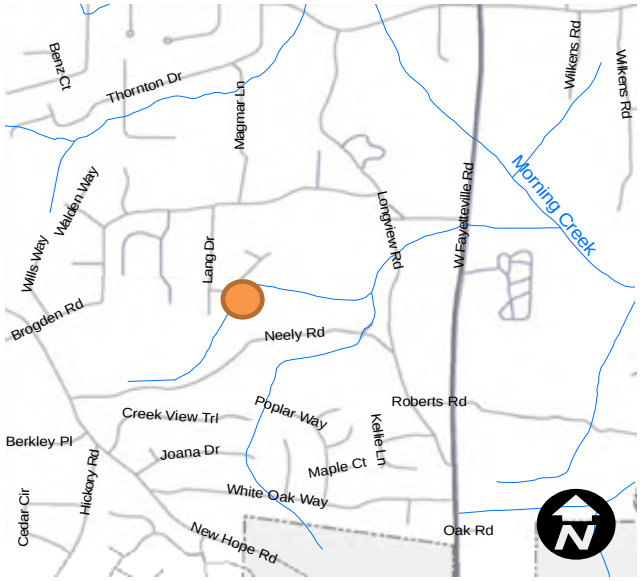
Condition Notes: Pipe separated from headwall; Stream parallel to road

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	Street Light above structure

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	X
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	dbl 9' x 4' box, concrete, 80' length
Utility Relocations	Street Light above structure, electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$4,200.00
Utility Relocation Cost		$17,600.00
Construction Cost		$174,344.70
Environmental Permits		$10,000.00
	Total Planning Estimate	**$221,144.70**

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Mathew Way

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Mathew Way

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Photo 5:

Photo 6:

Mathew Way

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,507.66
Curb and Gutter (LF)	$ 27.50	50	$ 1,375.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 2,882.66
Grading Complete (5% of Rwy Items & Drng Total $)			$ 7,083.99
Roadway Total			**$ 9,966.65**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	160	$ 111,725.08
Steel (lb)		$ 1.38	17018	$ 23,399.75
Type 2 Back Fill (cy)		$ 60.50	60.7	$ 3,672.35
Drainage Total				**$ 138,797.18**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 10,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.1	$ 41.80
Silt Fence (LF)	$ 5.50	150	$ 825.00
Check Dam Type C Silt Fence (LF)	$ 4.40	0	$ -
Erosion Control Mats (SY)	$ 2.75	50	$ 137.50
Mulch (TN)	$ 286.00	1	$ 286.00
Sod (SY)	$ 9.90	300	$ 2,970.00
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 5,712.30**
Construction Cost Total			**$ 164,476.13**
Traffic Control (6% of Construction Total $)			**$ 9,868.57**
Construction Cost Grand Total			**$ 174,344.70**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	50	$ 4,950.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	50	$ 3,575.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	50	$ 3,575.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	50	$ 5,500.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 17,600.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	2100	$ 4,200.00
ROW Total			**$ 4,200.00**

General Information	
Project ID	
Street Name	**420 North Drive**
Site Visit Date	5/22/13
Road Classification	Internal Local

Project Notes

Urban typical with Valley gutter

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-11'
Existing Shld Width (paved and grass) (feet)	6'
Existing Side Slopes	flat
Existing Guardrail	none
Depth fm Pavement to Top of Culvert (ft):	5
Pipe Type and Size	60" CMP, 80'
Pipe Condition (1-5) (1 is new)	3

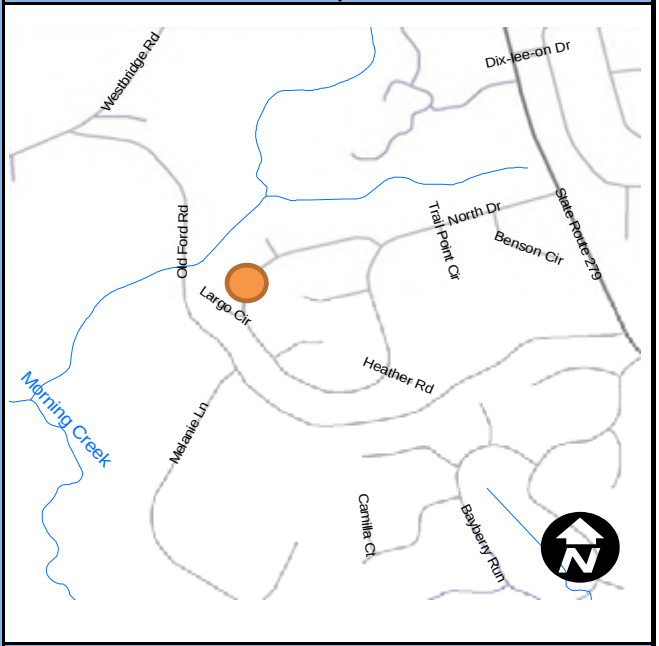
Condition Notes: No headwall; signs of sag towards downstream end, sediment approximately 1" deep

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None

Utilities (Visual Inspection)	
Electric	Buried
Cable	Buried
Phone	Buried
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Proposed Design

Roadway Section	
Culvert Size & Material	5' x 4' box, concrete, 80'
Utility Relocations	Street light near structure, electric, cable, phone, water
Guardrail Replacement	
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design		$15,000.00
Right of Way Cost		$6,000.00
Utility Relocation Cost		$14,080.00
Construction Cost		$72,268.58
Environmental Permits		$10,000.00
	Total Planning Estimate	**$117,348.58**

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North Drive

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Photo 3:

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North Drive

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 1,658.43
Curb and Gutter (LF)	$ 27.50	50	$ 1,375.00
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20		$ -
End Anchorage (EA)	$ 2,530.00		$ -
Subtotal			$ 3,033.43
Grading Complete (5% of Rwy Items & Drng Total $)			$ 2,415.35
Roadway Total			**$ 5,448.78**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	54	$ 37,376.74
Steel (lb)		$ 1.38	4806	$ 6,608.25
Type 2 Back Fill (cy)		$ 60.50	21.3	$ 1,288.65
Drainage Total				**$ 45,273.64**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ -
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 10,000.00**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.1	$ 41.80
Silt Fence (LF)	$ 5.50	220	$ 1,210.00
Check Dam Type C Silt Fence (LF)	$ 4.40		$ -
Erosion Control Mats (SY)	$ 2.75	60	$ 165.00
Mulch (TN)	$ 286.00	1	$ 286.00
Sod (SY)	$ 9.90	500	$ 4,950.00
Rip Rap (SY)	$ 66.00	20	$ 1,320.00
Plastic Filter Fabric (SY)	$ 6.60	20	$ 132.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 8,104.80**
Construction Cost Total			**$ 68,827.22**
Traffic Control (5% of Construction Total $)			**$ 3,441.36**
Construction Cost Grand Total			**$ 72,268.58**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	40	$ 3,960.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	40	$ 2,860.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	40	$ 2,860.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	40	$ 4,400.00
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 14,080.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	3000	**$ 6,000.00**
ROW Total			**$ 6,000.00**

General Information	
Project ID	
Street Name	**Old Senoia Road**
Site Visit Date	5/21/13
Road Classification	Collector

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2 - 12'
Existing Shld Width (paved and grass) (feet)	8' (G)
Existing Side Slopes	2:1 to 10:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	3'
Pipe Type and Size	3 - 96" CMP
Pipe Condition (1-5) (1 is new)	3

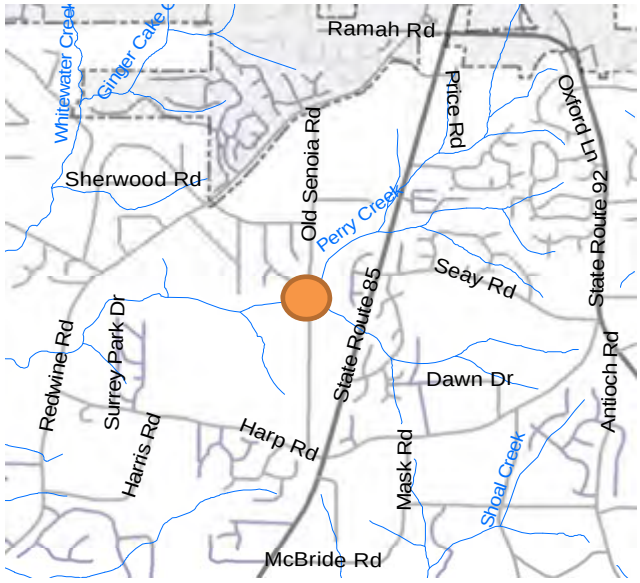
Condition Notes: Lining deteriorated, but pipes fully functioning; DS drop

Pavement Type/Condition	Asphalt/New

Environmental Features	
Wetlands	None identified
Ditches	None

Utilities (Visual Inspection)	
Electric	Aerial
Cable	
Phone	Aerial and Buried
Gas	
Water	Buried
Sewer	
Other	

Map



Stage Construction Options	
Close Location to Traffic	X
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:
Close Road - access from the South & North

Proposed Design

Roadway Section	
Proposed Design	100' prestressed concrete beam bridge, three spans, 43' wide
Utility Relocations	Buried Phone, Watermain
Guardrail Replacement	Proposed Guardrail Installation due to proposed culvert(s) and side slopes
Miscellaneous Features	Zone AE with Floodway, Floodplain Analysis Required

Planning Cost Estimate

Type	Description	Total
Design	bridge design and geotech (BFI) included	$140,949.73
Right of Way Cost		$12,000.00
Utility Relocation Cost		$26,125.00
Construction Cost		$459,497.27
Environmental Permits	environmental(bridge), floodplain analysis	$30,000.00
	Total Planning Estimate	**$668,572.00**

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Old Senoia Road

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Old Senoia Road

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Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 6,522.69
Curb and Gutter (LF)	$ 27.50		$ -
4" Sidewalk (SY)	$ 49.50		$ -
Guardrail (LF)	$ 57.20	650	$ 37,180.00
End Anchorage (EA)	$ 2,530.00	2	$ 5,060.00
Subtotal			$ 48,762.69
Grading Complete (5% of Rwy Items & Drng Total $)			$ 22,863.13
Roadway Total			**$ 71,625.83**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	0	$ -
Steel (lb)		$ 1.38	0	$ -
Type 2 Back Fill (cy)		$ 60.50	0	$ -
Bridge Cost (total)				$ 408,500.00
Drainage Total				**$ 408,500.00**

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping			$ 500.00
Signing and Marking Total			**$ 500.00**

Staging	Aerial	Installation Unit Cost	Amount	Total Cost
Temporary Pavement				$0
Temporary Drainage (Stream Diversi	Aerial and Buried	$ 10,000.00	1	$ 10,000.00
Staging Total	**Buried**			**$10,000**

Erosion Control		Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)		$ 418.00	0.15	$ 62.70
Silt Fence (LF)	100' prestressed co	$ 5.50	250	$ 1,375.00
Check Dam Type C Silt Fence (LF)		$ 4.40	200	$ 880.00
Erosion Control Mats (SY)		$ 2.75	225	$ 618.75
Mulch (TN)		$ 286.00	1.5	$ 429.00
Perm Grassing (ac)		$ 9.90	0.1	$ 0.99
Rip Rap (SY)		$ 66.00	50	$ 3,300.00
Plastic Filter Fabric (SY)		$ 6.60	50	$ 330.00
4" Ditch Paving (SY)		$ 33.00		$ -
				$ -
Erosion Control Total				**$ 6,996.44**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00	100	$ 6,600.00
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00	2	$ 1,375.00
Phone	$ -			
Aerial	$ 11.00	$ 27.50	0	$ -
Buried	$ 16.50	$ 55.00	100	$ 7,150.00
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable	$ -			
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	0	$ -
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas	$ -			
4" main	$ 16.50	$ 66.00		$ -
Water	$ -			
8" main	$ 16.50	$ 93.50	100	$ 11,000.00
Sewer	$ -			
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 26,125.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	6000	**$ 12,000.00**
Construction Cost Total			**$ 497,622.27**
Traffic Control (6% of Construction Total $)			**$ 29,857.34**
Construction Cost Grand Total			**$ 527,479.61**

General Information	
Project ID	
Street Name	190 Ponderosa Drive
Site Visit Date	Beverly Manor S/D
Road Classification	Internal Local

Project Notes

Replace 30-year old CMP with RCP. Replace flumes and with curb inlets and provide manhole access to pipe for inspection and maintenance. One of several pipe replacement projects in subdivision.

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2
Existing Shld Width (paved and grass) (feet)	NA - curb & gutter
Existing Side Slopes	NA - curb & gutter
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	NA
Pipe Type and Size	CMP, 48-inch Dia.
Pipe Condition (1-5) (1 is new)	5

Condition Notes: Pipe and associated structures are old and in poor condition.

Pavement Type/Condition	average

Environmental Features	
Wetlands	No
Ditches	NA

Utilities (Visual Inspection)	
Electric	Yes
Cable	Yes
Phone	Yes
Gas	Unknown
Water	Yes
Sewer	No
Other	

Map

Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	

Stage Construction Notes:

Minimal impacts to traffic and access can be maintained to all properties.

Proposed Design

Roadway Section	Typical subdivision with curb & gutter
Culvert Size & Material	Replace existing pipe with 48-inch RCP, approximately 40 ft.
Utility Relocations	As needed
Guardrail Replacement	None
Miscellaneous Features	

Planning Cost Estimate

Type	Notes	Total
Design	Preliminary complete, finish in-house	0
Right of Way Cost	Easements needed - request donation	$2,500
Utility Relocation Cost	Within ROW - non reimbursable	0
Construction Cost	See estimate sheet	$23,019
Environmental Permits	None expected	0
	Total Planning Estimate	$25,519

190 Ponderosa Dr

BY: ACA
DATE: 7/1/13

ITEM	UNIT	QUAN	Infl	PROJ QUAN	MATERIAL COST UNIT COST	MATERIAL COST TOTAL
Mobilization	lump	1	0%	1	0.00	0.00
Traffic Control	lump	1	0%	1	50.00	50.00
Temp. Silt fence	lf	100	0%	100	3.50	350.00
			0%	0		0.00
New Drainage System:			0%	0		0.00
48" RCP	lf	40	0%	40	55.50	2220.00
48" HW	ea	2	0%	2	660.00	1320.00
Catch Basin	ea	2	0%	2	4500.00	9000.00
Foundation backfill	ton	70	0%	70	7.50	525.00
			0%	0		0.00
Repair Road:			0%	0		0.00
Saw cut asphalt	lf	40	0%	40	0.50	20.00
Asphalt 9.5 mm Superpave 3.5"	ton	10.3	0%	10.30	47.00	484.10
GAB 12"	ton	18	0%	18	7.50	135.00
24" Rollback Curb	lf	40	0%	40	20.00	800.00
			0%	0		0.00
Grass / Landscaping	lump	1	0%	1	100.00	100.00
			0%	0		0.00
Equipment:			0%	0		0.00
Dump truck	hrs	24	0%	24	43.00	1032.00
Flat Bed truck	hrs	24	0%	24	28.00	672.00
Crew cab pickup	hrs	24	0%	24	30.00	720.00
Gradall	hrs	16	0%	16	39.00	624.00
Compactor plate	hrs	16	0%	16	6.75	108.00
Asphalt Spreader	hrs	8	0%	8	179.12	1432.96
Asphalt Roller (Lee Boy 400)	hrs	8	0%	8	12.50	100.00
			0%	0		0.00
Labor:			0%	0		0.00
4 man crew	hrs	32	0%	32	103.95	3326.40
			0%	0		0.00
						$23,019

Dam Detail Cost Estimates to be added

General Information	
Project ID	
Street Name	**120 Shoal Creek Rd.**
Site Visit Date	5/21/13
Road Classification	Internal Local

Project Notes

Rural Typical Section

Field Notes

Design (Existing Site Features)	
Existing Road Laneage	2-10'
Existing Shld Width (paved and grass) (feet)	2' Grass
Existing Side Slopes	2:1
Existing Guardrail	None
Depth fm Pavement to Top of Culvert (ft):	3
Pipe Type and Size	3-96" CMP
Pipe Condition (1-5) (1 is new)	3

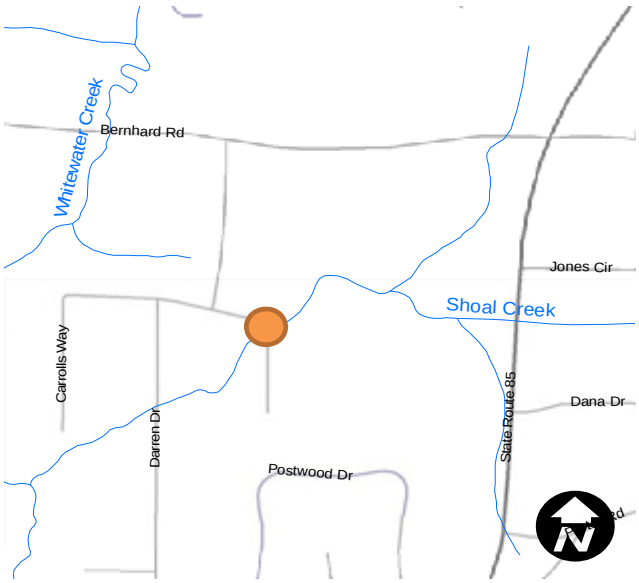
Condition Notes:

Pavement Type/Condition	Asphalt/Good

Environmental Features	
Wetlands	None
Ditches	None
Contrib. Stream (2)	

Utilities (Visual Inspection)	
Electric	Aerial
Cable	Buried
Phone	Aerial
Gas	None
Water	None
Sewer	None
Other	

Map



Stage Construction Options	
Close Location to Traffic	
Maintain One Lane - No Temp Pavement	
Maintain One Lane - Temp Pavement	X

Stage Construction Notes:

Proposed Design

Roadway Section	Replace in kind
Proposed Design	80' prestressed concrete beam bridge, 43' wide - profile elevation raise likely required for the bridge option
Utility Relocations	Telephone and Cable
Guardrail Replacement	Guardrail may be needed based on culvert length
Miscellaneous Features	Zone A, Floodplain Analysis Required

Planning Cost Estimate

Type	Notes	Total
Design	bridge design and geotech (BFI) included	$134,731.96
Right of Way Cost		$7,500.00
Utility Relocation Cost		$10,725.00
Construction Cost		$397,319.63
Environmental Permits	Permits, Floodplain Analysis	$18,000.00
	Total Planning Estimate	**$568,276.59**

Fayette County

JACOBS

Photo 1:

Photo 2:

Shoal Creek Road

Photo Date:
5/21/2013
Taken By:
David King
Page:
1

Photo 3:

Photo 4:

Shoal Creek Road

Photo Date:
5/21/2013
Taken By:
David King
Page:
2

Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Installation Unit Cost	Amount	Total Cost
Pavement			$ 4,522.99
Curb and Gutter (LF)	$ 27.50		
4" Sidewalk (SY)	$ 49.50		
Guardrail (LF)	$ 57.20		
End Anchorage (EA)	$ 2,530.00		
Subtotal			$ 4,522.99
Grading Complete (5% of Rwy Items & Drng Total $)			$ 16,566.15
Roadway Total			**$ 21,089.14**

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Class A Conc (cy)		$ 698.50	0	**$ -**
Steel (lb)		$ 1.38	0	**$ -**
Type 2 Back Fill (cy)		$ 60.50	0	**$ -**
Bridge Cost (total)				$ 326,800.00
Drainage Total				**$ 326,800.00**

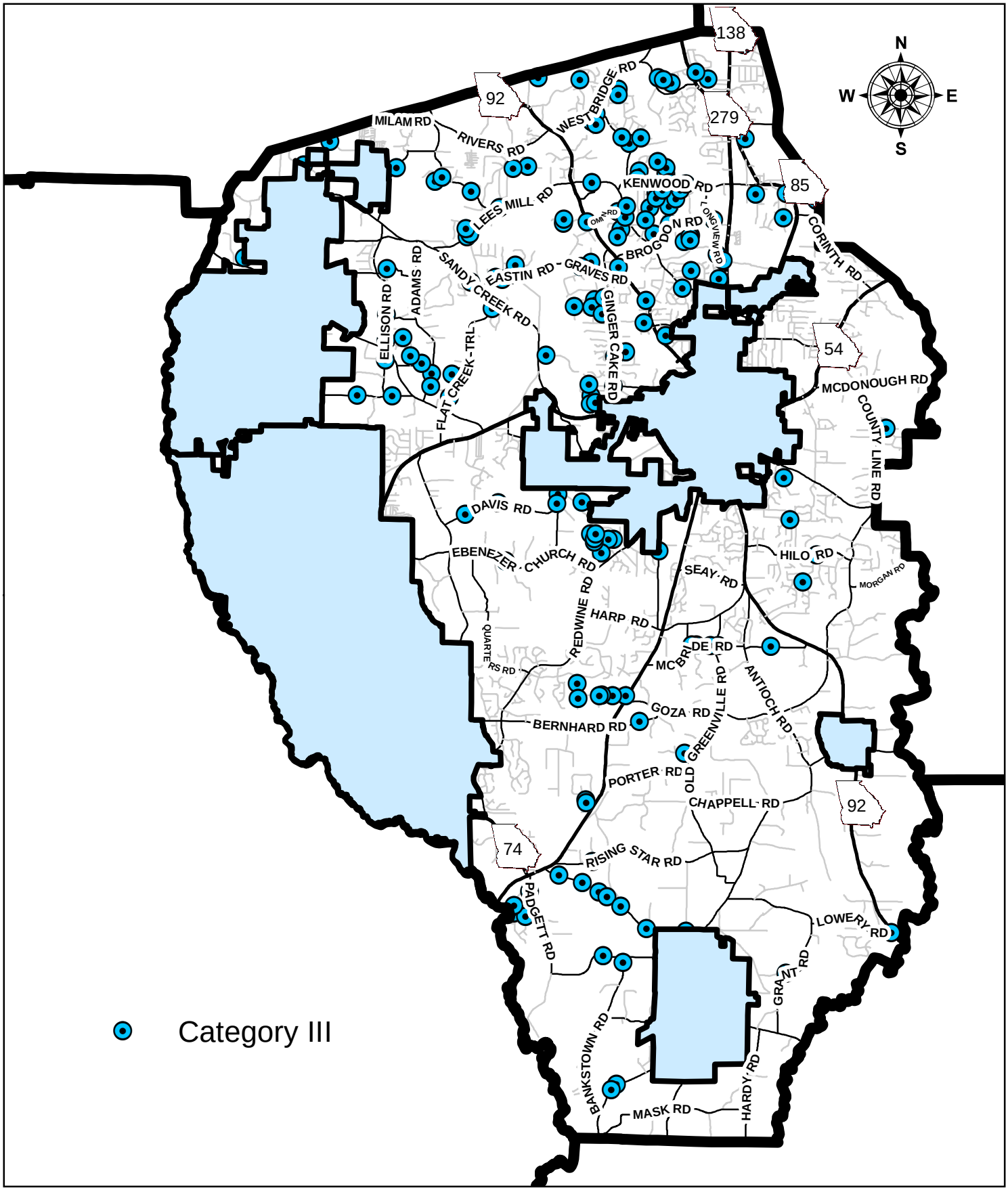
Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (mile)			$ -
Signing and Marking Total			**$ -**

Staging	Installation Unit Cost	Amount	Total Cost
Temporary Pavement			$ 9,045.97
Temporary Drainage (Stream Diversion)	$ 10,000.00	1	$ 10,000.00
Staging Total			**$ 19,045.97**

Erosion Control	Installation Unit Cost	Amount	Total Cost
Temporary Grassing (AC)	$ 418.00	0.35	$ 146.30
Silt Fence (LF)	$ 5.50	400	$ 2,200.00
Check Dam Type C Silt Fence (LF)	$ 4.40	100	$ 440.00
Erosion Control Mats (SY)	$ 2.75	225	$ 618.75
Mulch (TN)	$ 286.00	3	$ 858.00
Perm Grassing (ac)	$ 9.90	0.17	$ 1.68
Rip Rap (SY)	$ 66.00	50	$ 3,300.00
Plastic Filter Fabric (SY)	$ 6.60	50	$ 330.00
4" Ditch Paving (SY)	$ 33.00		$ -
Erosion Control Total			**$ 7,894.73**
Construction Cost Total			**$ 374,829.84**
Traffic Control (6% of Construction Total $)			**$ 22,489.79**
Construction Cost Grand Total			**$ 397,319.63**

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	$ 11.00	$ 55.00		$ -
Buried	$ 16.50	$ 82.50	0	$ -
Wooden Pole	$ 82.50	$ 605.00	0	$ -
Phone				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Cable				
Aerial	$ 11.00	$ 27.50		$ -
Buried	$ 16.50	$ 55.00	75	$ 5,362.50
Wooden Pole	$ 82.50	$ 605.00		$ -
Gas				
4" main	$ 16.50	$ 66.00		$ -
Water				
8" main	$ 16.50	$ 93.50	0	$ -
Sewer				
12" main	$ 16.50	$ 82.50	0	$ -
Utility Relocation Total				**$ 10,725.00**

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	$ 2.00	3750	**$ 7,500.00**
ROW Total			**$ 7,500.00**



CORE INFRASTRUCTURE SPLOST 2013

Draft for Public Comment

CATEGORY III

Project ID	Location	Installation	Material	Total
	214 Adams Rd	$2,599.80	$2,049.32	$4,649.12
	$100,000.00	$2,599.80	$1,246.68	$3,846.48
	375 Benjamin Cir	$12,999.00	$3,362.49	$16,361.49
	120 Benz Court	$12,999.00	$7,970.89	$20,969.89
	135 Benz Ct	$12,999.00	$4,034.15	$17,033.15
	228 Bernhard Rd	$2,599.80	$2,921.18	$5,520.98
	105 Berry Ridge Rd	$2,599.80	$1,941.78	$4,541.58
	120 Bon Ami Court	$4,421.76	$1,452.57	$5,874.33
	105 Brandon Mill Cir	$12,999.00	$2,896.37	$15,895.37
	130 Briarlake Court	$12,999.00	$2,258.97	$15,257.97
	205 Brookshire Dr	$2,599.80	$2,376.06	$4,975.86
	185 Brookshire Drive	$2,599.80	$2,376.06	$4,975.86
	Bulter Rd At Old Rd	$2,599.80	$1,697.90	$4,297.70
	Busbin At Charlottee Place	$2,599.80	$1,246.68	$3,846.48
	147 Busbin Rd	$2,599.80	$2,376.06	$4,975.86
	197 Busbin Rd	$2,599.80	$1,246.68	$3,846.48
	317 Busbin Rd	$2,599.80	$1,522.20	$4,122.00
	110 Catherine Ln	$12,999.00	$6,017.94	$19,016.94
	260 Country Lane Rd	$2,599.80	$2,376.06	$4,975.86
	100 Creekwood Ct	$12,999.00	$1,785.05	$14,784.05
	504 Davis Rd	$2,599.80	$3,527.70	$6,127.50
	107 Davis Rd	$2,599.80	$1,346.49	$3,946.29
	154 Dixon Cir	$2,599.80	$1,522.20	$4,122.00
	186 Dogwood Tr	$2,599.80	$1,389.96	$3,989.76
	388 Eastin Rd	$2,599.80	$1,389.96	$3,989.76
	506 Ebenezer Church Road	$2,599.80	$1,676.53	$4,276.33
	332 Ellison Rd	$2,599.80	$1,873.61	$4,473.41
	228 Ellison Rd	$2,599.80	$1,522.20	$4,122.00
	378 Ellison Road	$2,599.80	$1,319.08	$3,918.88
	155 Fairfield Cir	$12,999.00	$1,746.49	$14,745.49
	150 Feet From Sr 85 On Busbin	$2,599.80	$1,246.68	$3,846.48
	155 Flat Creek Ct	$2,599.80	$2,156.46	$4,756.26
	301 Flat Creek Trail	$2,599.80	$2,156.46	$4,756.26
	626 Flat Crk	$2,599.80	$1,389.96	$3,989.76
	100 Flat Crk	$2,599.80	$1,522.20	$4,122.00
	305 Franklin Farms Cir	$12,999.00	$3,362.49	$16,361.49
	105 Gentle Doe Dr	$12,999.00	$1,576.68	$14,575.68
	347 Ginger Cake Rd	$2,599.80	$1,389.96	$3,989.76
	216 Ginger Cake Rd	$2,599.80	$1,246.68	$3,846.48
	161 Ginger Cake Trail	$8,015.36	$11,635.10	$19,650.46
	271 Ginger Cake Trail	$8,015.36	$11,635.10	$19,650.46
	285 Green Vly	$2,599.80	$1,522.20	$4,122.00
	Hawn At Old Senoia	$2,599.80	$2,921.18	$5,520.98
	115 Heritage Way	$12,999.00	$3,763.17	$16,762.17
	159 Highland Hills Rd	$2,599.80	$1,829.69	$4,429.49

CATEGORY III

Project ID	Location	Installation	Material	Total
	210 Highland Hills Road	$2,599.80	$2,156.46	$4,756.26
	423 Highway 85 Conn	$2,599.80	$2,376.06	$4,975.86
	588 Highway 85 Conn	$2,599.80	$1,522.20	$4,122.00
	1373 Highway 85 Conn	$2,599.80	$1,246.68	$3,846.48
	1415 Highway 85 Conn	$2,599.80	$1,389.96	$3,989.76
	336 Highway 85 Connector	$2,599.80	$1,246.68	$3,846.48
	382 Hilo Rd	$2,599.80	$1,873.61	$4,473.41
	879 Hood Rd	$2,599.80	$1,246.68	$3,846.48
	1116 Hood Rd	$2,599.80	$1,346.49	$3,946.29
	115 Horse Shoe Circle	$2,599.80	$2,585.83	$5,185.63
	166 Hwy 85 Conn	$2,599.80	$1,697.90	$4,297.70
	246 Hwy 85 Conn	$2,599.80	$1,697.90	$4,297.70
	348 Hwy 85 Conn	$2,599.80	$2,376.06	$4,975.86
	130 Idlewood Ln	$2,599.80	$3,466.30	$6,066.10
	120 Kari Glen Drive	$2,599.80	$2,317.47	$4,917.27
	105 Ken Cir	$2,599.80	$1,389.96	$3,989.76
	215 Kirkly Rd	$2,599.80	$1,246.68	$3,846.48
	114 Kite Lake Road	$2,599.80	$1,052.64	$3,652.44
	285 Kite Lake Rd	$2,599.80	$1,522.20	$4,122.00
	257 Kite Lake Rd	$2,599.80	$1,873.61	$4,473.41
	130 Lady Helen Court	$2,599.80	$4,925.36	$7,525.16
	150 Lakeview Lane	$2,599.80	$3,527.70	$6,127.50
	210 Lang Drive	$2,599.80	$3,330.02	$5,929.82
	133 Laura Lane	$2,599.80	$1,522.20	$4,122.00
	584 Lees Mill Rd	$2,599.80	$1,389.96	$3,989.76
	431 Lester Rd	$2,599.80	$1,246.68	$3,846.48
	150 Little Creek Dr	$12,999.00	$1,507.22	$14,506.22
	160 Lofty Eagle Ln	$12,999.00	$2,566.88	$15,565.88
	185 Longview Rd	$2,599.80	$1,697.90	$4,297.70
	114 Lowery Road	$2,599.80	$3,950.78	$6,550.58
	100 Mackenzie Ln On Eastin	$12,999.00	$1,802.53	$14,801.53
	243 Mcbride Rd	$2,599.80	$3,738.86	$6,338.66
	456 Mcbride Rd	$2,599.80	$3,527.70	$6,127.50
	555 Mcbride Rd	$2,599.80	$1,941.78	$4,541.58
	285 Merrydale Dr	$2,599.80	$3,527.70	$6,127.50
	133 Mitchell Rd	$2,599.80	$1,246.68	$3,846.48
	395 Morgan Mill Rd	$2,599.80	$2,225.03	$4,824.83
	140 Muse Rd	$2,599.80	$1,246.68	$3,846.48
	110 Muse Rd And Lees Lake Rd	$2,599.80	$1,389.96	$3,989.76
	988 New Hope Road	$2,599.80	$919.41	$3,519.21
	762 New Hope Rd	$2,599.80	$2,049.32	$4,649.12
	245 North Dr	$12,999.00	$4,564.53	$17,563.53
	100 Northwind Trl	$12,999.00	$1,916.05	$14,915.05
	160 Old Mill Court	$12,999.00	$3,019.93	$16,018.93
	245 Omin Rd	$2,599.80	$1,246.68	$3,846.48

CATEGORY III

Project ID	Location	Installation	Material	Total
	125 Pinewood Dr	$2,599.80	$1,697.90	$4,297.70
	285 Plantation Road	$2,599.80	$1,246.68	$3,846.48
	Parcel Number 0703 022	$2,599.80	$1,103.39	$3,703.19
	Postwood Dr And Idlewood Ln	$2,599.80	$3,466.30	$6,066.10
	Providence Dr On Mcbride Rd	$2,599.80	$2,049.32	$4,649.12
	100 Redbud Ct	$2,599.80	$1,873.61	$4,473.41
	210 Rennes Ct	$12,999.00	$1,229.39	$14,228.39
	130 Rustic Mill Lane	$2,599.80	$4,283.98	$6,883.78
	150 Rustic Mill Lane	$2,599.80	$6,693.47	$9,293.27
	145 S Wood Ct	$12,999.00	$4,007.69	$17,006.69
	302 Sams Dr And Lees Mill Rd	$2,599.80	$1,819.82	$4,419.62
	310 Sherwood Rd	$2,599.80	$1,727.09	$4,326.89
	380 Sherwood Road	$2,599.80	$1,522.20	$4,122.00
	325 Sherwood Road	$2,599.80	$2,585.83	$5,185.63
	Sherwood Road And Brookshire	$2,599.80	$1,103.39	$3,703.19
	190 Starrs Mill Dr	$2,599.80	$1,697.90	$4,297.70
	105 Summerville Drive	$2,599.80	$2,479.30	$5,079.10
	171 Tall Pine Trail	$8,015.36	$10,891.10	$18,906.46
	East Of 166 Trammell Rd	$2,599.80	$1,346.49	$3,946.29
	112 Thompson Rd	$2,599.80	$1,346.49	$3,946.29
	130 Thornton Ct	$12,999.00	$2,431.43	$15,430.43
	240 Thornton Dr	$12,999.00	$2,340.71	$15,339.71
	165 Thornton Ln	$2,599.80	$1,246.68	$3,846.48
	128 Trickum Creek Rd	$2,599.80	$1,551.16	$4,150.96
	Wagon Wheel	$2,599.80	$4,373.87	$6,973.67
	330 Weeping Willow Way	$12,999.00	$3,964.09	$16,963.09
	140 Wesley Pl	$2,599.80	$1,246.68	$3,846.48
	155 Westbridge Cir	$2,599.80	$1,246.68	$3,846.48
	517 Westbridge Dr	$2,599.80	$6,296.99	$8,896.79
	320 White Oak Way	$2,599.80	$1,522.20	$4,122.00
	240 Whitney Way	$2,599.80	$2,648.62	$5,248.42
	136 Wilkins Rd	$2,599.80	$1,246.68	$3,846.48
	160 Wills Way	$12,999.00	$3,178.53	$16,177.53
	120 Wisteria Court	$12,999.00	$2,086.19	$15,085.19
	140 Yates Dr	$12,999.00	$1,514.99	$14,513.99
			TOTAL	**$912,198.62**

CATEGORY IV

Project Name	Cost
Stormwater Improvement Projects[1]	$400,000.00
Professional Services	$200,000.00
FY 2014 Stormwater Utility Reimbursement	$500,000.00
Equipment Purchases	
Vac-Con Jet Trailer	$95,000.00
F-450 Crew Cab	$45,000.00
Mini Excavator	$75,000.00
Single-axle Mini Dump Truck	$60,000.00
Tandem Axle Trailer	$7,500.00
TOTAL:	**$1,382,500.00**

1- Functionality improvements identified through inventory/inspections. Work will include paving inverts, replacing headwalls, and catch basin lids.

Ford F-450 Crew Cab

Tandem Axel Trailer

Mini Excavator

Vac-Con Jet Trailer