

SPLOST 2017 Stormwater Improvements Draft for Public Comment

## **CATEGORY II - TIER 1**

PROJECT NAME	PROJECT DESCRIPTION	ESTIMATED COST
514 Avalon Dr	48" RCP, 300'	\$169,118
215 Brandon Mill Cir - South	8'x4' RBC, 200'; system evaluation	\$437,648
266 Callaway Rd	trp 10'x4' RBC, 80'	\$533,218
364 Chappel Rd	dbl 8'x5' RBC, 70'	\$336,399
120 Deer Forest Trl	4'x3' RBC, 100'	\$145,508
315 Dogwood Trl	trp 7' x 7' RBC, 80'	\$595,879
120 Mercedes Trl	dbl 8'x4' RBC, 60'	\$224,070
130 Morning Dove Dr	dbl 10'x4' RBC, 70'	\$244,389
151 Patricia Ln	8'x4' RBC, 150'	\$295,527
199 Roberts Rd	7'x4' RBC, 85'	\$193,861
160 Scott Blvd	4'x2' RBC, 50'	\$99,114
175 Silver Leaf Dr	dbl 4'x3' RBC, 140'	\$247,827
503 Westbridge Dr	5'x3' RBC, 45'	\$89,733
517 Westbridge Dr	5'x3' RBC, 45'	\$93,082
	Tier 1 Subtotal	\$3,705,373

General Inf	formation	Мар
Project ID		
Street Name	Avalon Dr	
	6/11/2013	
Site Visit Date	Internal Local	
Road Classification Internal Local Project Notes		
· · · · · · · · · · · · · · · · · · ·		
Rural typical section		Avaha D
		3
		Old Mag no lie. Lin
		Old Mag no is Ln
Field N	latas	Company Way Company Company Company Way Company Compan
		4 1
Design (Existing		* 5
Existing Road Laneage	2 - 12'	a source
Existing Shid Width (paved and		Aspen Way 0
Existing Side Slopes	flat	ii danada ii
Existing Guardrail	None	0"   13
Depth fm Pavement to Top of Cu		Codec Ln
Pipe Type and Size	30", 300' CMP	1
Pipe Condition (1-5) (1 is new)	\$ 3.00	
Pavement Type/Condition	Asphalt/Good	
		Stage Construction Options
Environment		Close Location to Traffic X
Wetlands	None	Maintain One Lane - No Temp Pavement
Ditches	X	Maintain One Lane - Temp Pavement
		Stage Construction Notes:
Utilities (Visua	ll Inspection)	
Electric	Aerial	
Cable	Aerial	
Phone	Aerial	
Gas	None	
Water	X	
Sewer	None	
Other		
	Propose	d Design
Bandway Castion	Typical	
Roadway Section		
Culvert Size 9 Meterial	48" round RCP, 300' length	
Culvert Size & Material		
Heilie Dalaasias	Water main	
Utility Relocations		
Cuandrall Devilence:		
Guardrail Replacement		
Miscellaneous Features		
imesonarios de l'odiares		
	Planning C	ost Estimate
Туре	Notes	
Design	Includes 10% Construction Co	
Right of Way Cost	Assuming 2,000 sf o	
Utility Relocation Cost	50 ft of wate	
Construction Cost	Applying 1/10 acre clearin	
Environmental Permits	Assuming mininmal environment	
Environmental Fermits	Assuming millimial enviloning	Sinai pormitting required \$10,000
	T.4.1 P.	annin y Fatimata
	Iotal P	anning Estimate \$169,118
The state of the s		







Photo 1:



Photo 2:

7/2/2013

Taken By:

David King

Page:

•	•					
Roadway Construction	Removal	I Unit Cost	Installation Unit Cost	Amount	To	tal Cost
Pavement (SF)	\$	0.73	4.87	\$ 600.00	\$	3,363.20
Curb and Gutter (LF)	\$	28.56	30.60	\$ -	\$	-
Drain Inlet (EA)			3,000.00		\$	_
4" Sidewalk (SY)	\$	13.56	36.90		\$	_
Guardrail (LF)	\$	4.88	49.09		\$	
, ,	Ψ	4.00				_
End Anchorage (EA)			1,380.00	φ -	\$	
Subtotal					\$	3,363.20
Grading Complete (5% of Rwy Items & Drng Total \$)					\$	4,637.64
Roadway Total					\$	8,000.84
Drainage	Removal	I Unit Cost	Installation Unit Cost	Amount	To	tal Cost
Trench Excavation (CY)			10.38	\$ 600.00	\$	6,228.00
30" CMP (LF)	\$	19.62		\$ 300.00	\$	5,886.00
48" RCP (LF)			193.20	\$ 300.00	\$	57,960.00
Class A Conc (CY)			892.19	\$ 13.70		12,222.98
Steel (lb)			1.42		\$	
Pipe Bedding (CY)			48.60		\$	3,240.00
Trench Backfill (CY)			2.99		\$	1,425.40
Trench Compaction (CY)			6.36		\$	2,427.18
Drainage Total					\$	89,389.55
·			Installation Unit Cost	Amount		
Signing and Marking			Installation Unit Cost			tal Cost
Permanent Striping (LF)			0.71	\$ -	\$	-
Signing and Marking Total					\$	-
Staging			Installation Unit Cost	Amount	To	tal Cost
Staging Clearing and Grubbing (Acre)			10,260.00		\$	
			10,260.00	\$ 0.10		1,026.00
Temporary Pavement			4 400 00	0 400	\$	4 400 00
Temporary Drainage (Stream Diversion)			4,428.00	\$ 1.00	\$	4,428.00
Staging Total					\$	5,454.00
Erosion Control			Installation Unit Cost	Amount		tal Cost
Fine Grading and Seeding (SY)			4.39	\$ 766.67	\$	3,367.20
Temporary Grassing (AC)			855.60	\$ -	\$	-
Type C Silt Fence (LF)			4.24	\$ 600.00	\$	2,541.60
Check Dam Type C Silt Fence (LF)			6.79	\$ 600.00	\$	4,075.20
Erosion Control Mats (SY)			1.87	\$ 200.00	\$	374.40
Landscape Mulch (SY)			3.58	\$ 200.00	\$	715.20
Perm Grassing (AC)			1,402.20	\$ -	\$	-
Rip Rap Type 3 12" (SY)			60.98		\$	4,065.60
Plastic Filter Fabric (SY)			5.72		\$	381.60
4" Ditch Paving (SY)			54.65		\$	-
Erosion Control Total						1E E20 80
Erosion Control Total					Ф	15,520.80
Construction Cost Total					\$1	18,365.19
Traffic Control (8% of Construction Total \$)					\$	9,469.22
Construction Cost Grand Total					\$1	27,834.41
Utility Relocation	Removal	I Unit Cost	Installation Unit Cost	Amount	To	tal Cost
Electric						
Aerial	\$	11.00	55.00	\$ -	\$	-
Buried	\$	16.50	82.50		\$	-
Wooden Pole	\$	82.50	605.00		\$	-
Phone	•		222.00	*	•	
Aerial	\$	11.00	27.50	s -	\$	_
Buried	\$	16.50	55.00		\$	_
Wooden Pole	\$	82.50	605.00		\$	-
Cable	Ψ	02.00	005.00	φ -	φ	-
Aerial	\$	11.00	27.50	¢ -	\$	
						-
Buried	\$	16.50	55.00		\$	-
Wooden Pole	\$	82.50	605.00	\$ -	\$	-
Gas 4" main	\$	16.50	66.00	\$	\$	
4 main Water	φ	0.00	00.00	- <b>پ</b>	Φ	-
	•	40.50	00.50	• 50.00	•	F F00 00
8" main	\$	16.50	93.50		\$	5,500.00
Relocate Fire Hydrant (EA)			2,609.22	\$ -	\$	-
Sewer						
12" main	\$	16.50	82.50	\$ -	\$	-
Utility Relocation Total					\$	5,500.00
Right of Way (Sq Ft)			Cost/ Sq Ft	Sq Ft	To	tal Cost
Permanent Easement			4.00		\$	8,000.00
ROW Total				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$	8,000.00
					Ψ	0,000.00

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

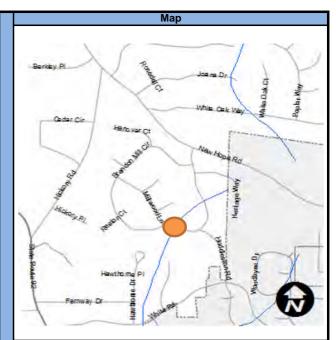
**Project Notes** 

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	N	one		
Utilities (Visua	al Inspection)			
Electric	Buried			
Cable	Buried			
Phone	Buried			
Gas				
Water	Buried			
Sewer				
Other				



Stage Construction Options					
X					

Stage Construction Notes: Close roadway;

driveway over pipe; replacement impacts property to the right

\$437,648

Otner						
	Proposed Design					
Roadway Section	Typical. Private driveway removal/replacement costed as 9' x 20' s	Typical. Private driveway removal/replacement costed as 9' x 20' section of 4" sidewalk				
Culvert Size & Material	8' x 4' box, concrete, 200' length					
Jtility 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				
Design	Includes 10% Construction Cost and surveying needs	\$42,841				
Right of Way Cost	Assuming project extends 7,500 sf beyond ROW	\$30,000				
Utility Relocation Cost	Buried utilities	\$26,400				
Construction Cost	Assuming 1/10 acre clearing and grubbing	\$303,407				
Environmental Permits	Assuming minimal environmental permitting required	\$10,000				

**Total Planning Estimate** 







Photo 1:



Photo 2:

6/13/2016

Taken By:

Tony Hicks

Page:

## Roadway Construction, Utility Relocation and ROW Quantity Calculations

	Pon	noval		nstallation			
Roadway Construction	Unit	Cost		Unit Cost	Amount		Total Cost
Pavement (SF) Curb and Gutter (LF)	\$ \$	0.73 28.56	\$	4.87 30.60	200.00 20.00		1,121.0 1,183.2
Orain Inlet (EA)	Ф	20.30	\$	3,000.00	0.00		1,103.2
" Sidewalk (SY)		13.56	\$	36.90	20.00	\$	1,009.2
Guardrail (LF)		4.884	\$	49.09	0.00		-
nd Anchorage (EA)			\$	1,380.00	0.00		-
Subtotal						\$	3,313.4
Grading Complete (5% of Rwy Items & Drng To	otal \$)					\$	12,502.2
Roadway Total						\$	15,815.6
·	Pon	noval		Installation			·
Drainage		Cost		Unit Cost	Amount		Total Cost
rench Excavation (CY) 2" CMP (LF)	\$	54.00	\$	10.38	814.81 200.00		8,457.7
2" RCP	φ	34.00	\$	390.00	0.00		32,400.0
lass A Conc (CY)			\$	892.19	183.68		163,877.0
teel (lb)			\$	1.42	21835.00		30,918.3
ipe Bedding (CY)			\$	48.60	74.80	\$	3,635.2
rench Backfill (CY)			\$	2.99	921.50		2,753.4
rench Compaction (CY)			\$	6.36	737.20	\$	4,688.5
rainage Total						\$	246,730.5
Signing and Marking			ı	Installation	Amount		Total Cost
ermanent Striping (LF)			\$	Unit Cost 0.71	0	\$	_
,			Ψ	0.71	0		
Signing and Marking Total						\$	•
Staging			ı	Installation Unit Cost	Amount		Total Cost
learing and Grubbing (Acre)			\$	10,260.00	0.10	\$	1,026.0
emporary Pavement emporary Drainage (Stream Diversion)			\$	4,428.00	1.00	\$	4,428.0
taging Total						\$	5,454.0
aging rotal						•	0,404.0
Erosion Control			ı	Installation	Amount		Total Cost
			•	Unit Cost		•	
ine Grading and Seeding (SY) emporary Grassing (AC)			\$ \$	4.39 855.60	200.00		878.4
Type C Silt Fence (LF)			\$	4.24	800.00		3,388.8
Check Dam Type C Silt Fence (LF)			\$	6.79	800.00		5,433.6
rosion Control Mats (SY)			\$	1.87	266.67	\$	499.2
andscape Mulch (SY)			\$	3.58	266.67		953.6
Perm Grassing (AC)			\$	1,402.20	0.00		-
Rip Rap Type 3 12" (SY)			\$	60.98	26.67 26.67		1,626.2
lastic Filter Fabric (SY) " Ditch Paving (SY)			\$	5.72 54.65	0.00		152.6
rosion Control Total			_			\$	12,932.4
onstruction Cost Total						\$	
						Þ	280,932.6
raffic Control (8% of Construction Total )						\$	22,474.0
Construction Cost Grand Total						\$	303,407.2
Utility Relocation		noval	ı	Installation	Amount		Total Cost
Electric	Unit	Cost		Unit Cost			
erial	\$	11.00	\$	55.00		\$	-
uried /ooden Pole	\$	16.50	\$	82.50	75	\$	7,425.0
Phone	\$	82.50	\$	605.00		\$	-
erial	\$	11.00	\$	27.50		\$	-
uried	\$	16.50	\$	55.00	75	\$	5,362.5
Vooden Pole	\$	82.50	\$	605.00		\$	-
Cable	•	44.0-	_	a=		<b>c</b>	
erial	\$	11.00	\$	27.50		\$	- -
uried Vooden Pole	\$ \$	16.50 82.50	\$	55.00 605.00	75	\$ \$	5,362.5
Gas	φ	JZ.JU	Ψ	003.00		Ψ	-
" main	\$	16.50	\$	66.00		\$	-
Water							
" main	\$	16.50	\$	93.50	75		8,250.0
elocate Fire Hydrant (EA) Sewer			\$	2,609.22	0	\$	-
2" main Itility Relocation Total	\$	16.50	\$	82.50	0.00	\$ <b>\$</b>	- 26,400.0
unty Nelocation Total						Ψ	20,400.0
ight of Way (Sq Ft)			Со	st/ Sq Ft	Sq Ft	Tota	l Cost
ermanent Easement			\$	4.00	7500		30,000.0
OW Total						\$	30,000.0

General In	formation		Мар
Project ID			
Street Name	266 Callaway Rd.	Buckaye Lu	McDonagh Rd
Site Visit Date	5/21/13	yes/c	McConagh & Constitution of the Constitution of
Road Classification	Minor road	# 2 D	\$ \Q\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Project		10 m	1 /a /a
Rural Typical Section	110103	S SEASON	KIN
itulai Typicai Section		() 1 4 1	
		14 / Ko ( T	Dub Rd
		184	The state of the s
			CearbookWay 5
Field I	Notes	7- (3)	
Design (Existing		Hilliacius Tel	Den CeekTri
Existing Road Laneage	2 - 12'		
Existing ShId Width (paved and	grass) (feet) 2' (Grass)	= 4	Hot m
Existing Side Slopes	2:1	+4-	Brianwood Ct
Existing Guardrail	None	7 17	
Depth fm Pavement to Top of Cu	Ilvert (ft): Assumed 3'	1	She by Lri
Pipe Type and Size	60" CMP (egg)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A ve
Pipe Condition (1-5) (1 is new)	4	widte a p	California California
Condition Notes:			ate a
		7.7	
Pavement Type/Condition	Asphalt/Good		
· ·		Stage	Construction Options
Environmen	tal Features	Close Location to Traffi	
Wetlands	None	Maintain One Lane - No	
Ditches	Noted	Maintain One Lane - Ter	np Pavement
		Stage Construction Notes	:
		45 mph posted speed	
Utilities (Visua	al Inspection)		
Electric	Aerial		
Cable	None		
Phone	Aerial		
Gas	None		
Water	Buried		
Sewer	None		
Other			
	Propose	ed Design	
Roadway Section			
Culvert Size & Material		ngth. Cost of removing eliptic	cal CMP assumed to be equal to circular
	CMP		
Utility Relocations	Water		
	Need to install quardrail due to sig	المالية من المعادلة	ion
Guardrail Replacement	Need to install guardrall due to sic	de slopes and culvert installat	ion
	Zone A, Floodplain Analysis Requ	uired	
Miscellaneous Features	Zone A, Floodplain Analysis Requ	illeu	
	Planning C	Cost Estimate	
Туре	Notes		Total
Design	Includes 10% design cost		\$53,724
Right of Way Cost	Assuming project extends 1		\$44,000
Utility Relocation Cost	Buried wate		\$8,250
Construction Cost	Assuming 1/10 acre clearing		\$412,243
Environmental Permits	Includes Zone A Floo		\$15,000
		,	. , , , , , ,
	Total D	lanning Estimate	\$533,218
	i otal P	iaiiiiiiy Estiiliate	<b>ფ</b> ეაა,∠ ι 0







Photo 1:



Photo 2:

5/21/2013

Taken By:

David King

Page:





Photo 3:



Photo 4:

9/26/2012

Taken By:

Tony Hicks

Page:

Roadway Construction Pavement (SF) Curb and Gutter (LF) Drain Inlet (EA) 4" Sidewalk (SY) Guardrail (LF) End Anchorage (EA) Subtotal  Grading Complete (5% of Rwy Items & Drng Total \$)	Removal Unit Cost \$ 0.73 \$ 28.56 \$ 13.56 \$ 4.88	Installation Unit Cost \$ 4.87 \$ 30.60 \$ 3,000.00 \$ 36.90 \$ 49.09 \$ 1,380.00	0.00 0.00	\$ - \$ -
Roadway Total				\$ 57,162.17
Drainage Trench Excavation (CY) 60" CMP (LF) 84" RCP Class A Conc (CY) Steel (lb) Pipe Bedding (CY) Trench Backfill (CY) Trench Compaction (CY)	Removal Unit Cost \$ 24.60	Installation Unit Cost \$ 10.38 \$ 142.52 \$ 892.19 \$ 1.42 \$ 48.60 \$ 2.99 \$ 6.36	80.00 0.00 262.44 30,224.00 97.20 873.47	\$ 5,904.00 \$ - \$234,145.82 \$ 42,797.18 \$ 4,723.92 \$ 2,609.92
Drainage Total				\$303,482.64
Signing and Marking Permanent Striping (LF)		Installation Unit Cost \$ 0.71	Amount 0.00	Total Cost \$ -
Signing and Marking Total				\$ -
Staging Clearing and Grubbing (Acre) Temporary Pavement Temporary Drainage (Stream Diversion)		Installation Unit Cost \$ 10,260.00 \$ 4,428.00	Amount 0.10 1.00	Total Cost \$ 1,026.00 \$ - \$ 4,428.00
Staging Total		, , , , , , , , , , , , , , , , , , , ,		\$ 5,454.00
Erosion Control Fine Grading and Seeding (SY) Temporary Grassing (AC) Type C Silt Fence (LF) Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC)		Installation Unit Cost \$ 4.39 \$ 855.60 \$ 4.24 \$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20	0.00 640.00 640.00 213.33 213.33	\$ - \$ 2,711.04 \$ 4,346.88 \$ 399.36 \$ 762.88
Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)		\$ 60.98 \$ 5.72 \$ 54.65	96.00	\$ 549.50
Erosion Control Total				\$ 15,607.94
Construction Cost Total				\$381,706.75
Traffic Control (8% of Construction Total \$)				\$ 30,536.54
Construction Cost Grand Total				\$412,243.29
Utility Relocation Electric Phone Cable Gas	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
4" main Water	\$ 16.50	\$ 66.00		\$ -
Relocate Fire Hydrant (EA) Utility Relocation Total	\$ 16.50	\$ 93.50 \$ 2,609.22		\$ 8,250.00 \$ - \$ 8,250.00
Right of Way (Sq Ft) Permanent Easement ROW Total		Cost/ Sq Ft \$ 4.00	Sq Ft 11,000.00	Total Cost

General In	formation			Мар
	liorination			wap
Project ID				Y
Street Name	Chappe	ell Rd.	6028 Rd	Kayla Or
Site Visit Date	5/21	/13		
Road Classification	Minor a	arterial	Socar	1 101
Project	t Notes			
Rural Typical Section			Old Greenwille, Rd. Marrie Dr.	The season of th
Field	Notes		( ) 4	3
Design (Existing			Cris ppell Rd	Q 5 F
Existing Road Laneage	9 0.10 1 0.11.11.00/	2 - 12'	/\ 5	Modery Creek
Existing Shid Width (paved and	grass) (feet)	1' - 2'	1 1	\$ 10m
Existing Side Slopes	grass) (rect)	1.5:1	1 1 1	, ma \ \$ 3 \ m
Existing Guardrail		None	Asort Dn Aso	1 8 / - /
Depth fm Pavement to Top of Cu	Ilvort (ft):	6'	Reing Star Rd	Burch lake Rd
	iiveit (it).			
Pipe Type and Size		1-72" CMP	3	141
Pipe Condition (1-5) (1 is new)		3	4	775
Condition Notes:			History Rd	Malone Rd
Pavement Type/Condition		Asphalt/Good		
			Stage Con	struction Options
Environmen	tal Features		Close Location to Traffic	
Wetlands	Upstrea	am (?)	Maintain One Lane - No Tem	np Pavement
Ditches	Along		Maintain One Lane - Temp R	Road X
			Stage Construction Notes:	
			Near side street and driveway	,
			40 mph work zone	
Utilities (Visua	al Inspection)		1 10 11.711 11.011.201.0	
Electric	Aer	ial		
Cable	Buri			
Phone	Buri			
Gas	24			
Water	Buri	ied		
Sewer	Dan			
Other				
Other		Dronos	lled Design	
	Typical For cost		mporary road consists of 8" grave	N fill
Roadway Section				51 IIII
Culvert Size & Material	dbl 8' x 5' box, co		U	
Utility Relocations	Cable, telephone			
Guardrail Replacement	Proposed Guardi	rail Installation d	ue to proposed culvert(s) and side	slopes
Miscellaneous Features				
			Cost Estimate	
		Notes		Total
Туре			and an all according to the analysis	<b>#</b> 00.004
Design		6 Construction C		\$28,964
Design Right of Way Cost		oroject extends 1	6,250 sf beyond ROW	\$32,500
Design Right of Way Cost Utility Relocation Cost	Assuming p	oroject extends 1 Buried ut	6,250 sf beyond ROW lities	\$32,500 \$25,300
Design Right of Way Cost	Assuming p	oroject extends 1 Buried ut	6,250 sf beyond ROW lities aring and grubbing	\$32,500

**Total Planning Estimate** 

\$336,399







Photo 1:

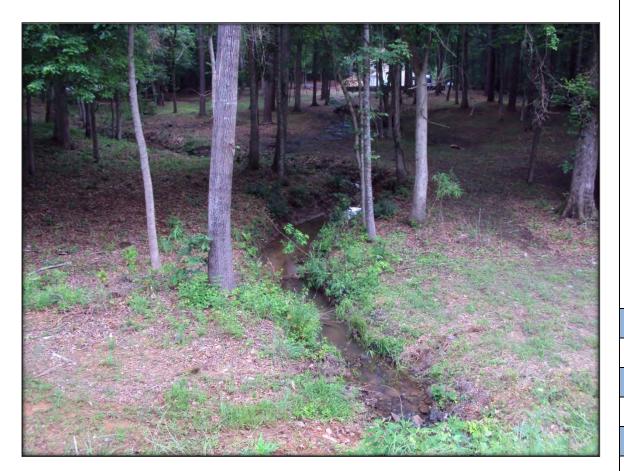


Photo 2:

5/21/2013

Taken By:

David King

Page:





Photo 3:



Photo 4:

5/21/2013

Taken By:

David King

Page:

Desil a Constanting	D	0	1		A	T. ( . 1 O (
Roadway Construction	Removal Un		Installation Unit C		Amount	Total Cost
Pavement (SF)	\$ \$	0.73 28.56	\$ \$	4.87 30.60	432.00 0.00	\$ 2,421.50
Curb and Gutter (LF) Drain Inlet (EA)	Φ	20.50		00.00	0.00	
4" Sidewalk (SY)	\$	13.56		36.90	0.00	
Guardrail (LF)	\$	4.88		19.09	625.00	
End Anchorage (EA)	•			30.00	2.00	
Subtotal						\$ 38,916.50
Grading Complete (5% of Rwy Items & Drng Total \$)						\$ 10,164.98
Roadway Total						\$ 49,081.49
Drainage	Domovallla	it Coat	Installation Unit C	· oot	Amount	Total Coat
Drainage Trench Excavation (CY)	Removal Un	iii Cosi	Installation Unit C \$ 1	10.38	606.67	Total Cost \$ 6,297.20
72" CMP (LF)	\$	63.00	Ψ	10.30		\$ 13,230.00
72" RCP (LF)	•	00.00	\$ 39	90.00	0.00	
Class A Conc (CY)				2.19	132.51	\$118,223.83
Steel (lb)			\$	1.42	13,383.00	\$ 18,950.33
Pipe Bedding (CY)				18.60	48.00	
Trench Backfill (CY)			\$	2.99	662.33	
Trench Compaction (CY)			\$	6.36	529.87	\$ 3,369.9
Drainage Total						¢ 16/ 202 1/
Drainage Total						\$ 164,383.16
Signing and Marking			Installation Unit C	ost	Amount	Total Cost
Permanent Striping (LF)			\$	0.71	72.00	\$ 50.98
			*		. 2.50	, 00.00
Signing and Marking Total						\$ 50.98
Staging			Installation Unit C		Amount	Total Cost
Clearing and Grubbing (Acre)			\$ 10,26		0.10	
Temporary Gravel Road (SY)				15.42	977.78	\$ 15,077.33
Temporary Drainage (Stream Diversion)			\$ 4,42	28.00	1.00	\$ 4,428.00
Staging Total						\$ 20,633.29
Staging Total						Ψ 20,000.20
Erosion Control			Installation Unit C	ost	Amount	Total Cost
Fine Grading and Seeding (SY)			\$	4.39	92.00	\$ 404.06
Temporary Grassing (AC)				55.60	0.00	
Type C Silt Fence (LF)				4.24	280.00	
Check Dam Type C Silt Fence (LF)			\$	6.79	280.00	\$ 1,901.76
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY)			\$ \$	6.79 1.87	280.00 93.33	\$ 1,901.76 \$ 174.72
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY)			\$ \$ \$	6.79 1.87 3.58	280.00 93.33 93.33	\$ 1,901.76 \$ 174.72 \$ 333.76
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC)			\$ \$ \$ \$	6.79 1.87 3.58 02.20	280.00 93.33 93.33 0.00	\$ 1,901.76 \$ 174.72 \$ 333.76 \$ -
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY)			\$ \$ \$ \$ 1,40	6.79 1.87 3.58 02.20 60.98	280.00 93.33 93.33 0.00 48.00	\$ 1,901.76 \$ 174.72 \$ 333.76 \$ \$ 2,927.23
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC)			\$ \$ \$ \$ \$ \$	6.79 1.87 3.58 02.20	280.00 93.33 93.33 0.00	\$ 1,901.76 \$ 174.72 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY)			\$ \$ \$ \$ \$ \$	6.79 1.87 3.58 02.20 60.98 5.72	280.00 93.33 93.33 0.00 48.00 48.00	\$ 1,901.76 \$ 174.72 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY)			\$ \$ \$ \$ \$ \$	6.79 1.87 3.58 02.20 60.98 5.72	280.00 93.33 93.33 0.00 48.00 48.00	\$ 1,901.76 \$ 174.72 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total			\$ \$ \$ \$ \$ \$	6.79 1.87 3.58 02.20 60.98 5.72	280.00 93.33 93.33 0.00 48.00 48.00	\$ 1,901.76 \$ 174.72 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ - \$ 7,202.33
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)			\$ \$ \$ \$ \$ \$	6.79 1.87 3.58 02.20 60.98 5.72	280.00 93.33 93.33 0.00 48.00 48.00	\$ 1,901.76 \$ 174.72 \$ 333.76 \$ 2,927.23 \$ 274.75 \$ -
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total			\$ \$ \$ \$ \$ \$	6.79 1.87 3.58 02.20 60.98 5.72	280.00 93.33 93.33 0.00 48.00 48.00	\$ 1,901.76 \$ 174.72 \$ 333.77 \$ 2,927.22 \$ 274.78 \$ - \$ 7,202.33
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total			\$ \$ \$ \$ \$ \$	6.79 1.87 3.58 02.20 60.98 5.72	280.00 93.33 93.33 0.00 48.00 48.00	\$ 1,901.76 \$ 174.72 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ - \$ 7,202.33
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total			\$ \$ \$ \$ \$ \$	6.79 1.87 3.58 02.20 60.98 5.72	280.00 93.33 93.33 0.00 48.00 48.00	\$ 1,901.76 \$ 174.72 \$ 333.77 \$ 2,927.22 \$ 274.78 \$ - \$ 7,202.33
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 02.20 60.98 5.72 54.65	280.00 93.33 93.33 0.00 48.00 0.00	\$ 1,901.76 \$ 174.73 \$ 333.76 \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 241,351.26 \$ 19,308.16 \$ 260,659.36
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation	Removal Un	it Cost	\$ \$ \$ \$ \$ \$	6.79 1.87 3.58 02.20 60.98 5.72 54.65	280.00 93.33 93.33 0.00 48.00 48.00	\$ 1,901.76 \$ 174.73 \$ 333.76 \$ - \$ 2,927.23 \$ 274.73 \$ 7,202.33 \$ 241,351.26 \$ 19,308.10
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 02.20 60.98 5.72 54.65	280.00 93.33 93.33 0.00 48.00 0.00	\$ 1,901.76 \$ 174.77 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ 7,202.37 \$ 19,308.10 \$ 260,659.38
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial	\$	11.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 02.20 60.98 5.72 64.65	280.00 93.33 93.33 0.00 48.00 48.00 0.00	\$ 1,901.76 \$ 174.73 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 241,351.23 \$ 19,308.10 \$ 260,659.38 Total Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried	\$ \$	11.00 16.50	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 02.20 60.98 5.72 54.65	280.00 93.33 93.33 0.00 48.00 0.00	\$ 1,901.76 \$ 174.7′ \$ 333.76 \$ 2,927.2′ \$ 274.7′ \$ 7,202.3′ \$ 241,351.26 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ -
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole	\$	11.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 02.20 60.98 5.72 64.65	280.00 93.33 93.33 0.00 48.00 48.00 0.00	\$ 1,901.76 \$ 174.73 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 241,351.23 \$ 19,308.10 \$ 260,659.38 Total Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone	\$ \$ \$	11.00 16.50 82.50	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 12.20 50.98 5.72 64.65	280.00 93.33 93.33 0.00 48.00 48.00 0.00	\$ 1,901.76 \$ 174.72 \$ 333.76 \$ 2,927.23 \$ 274.73 \$ 7,202.33 \$ 241,351.26 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ -
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole	\$ \$	11.00 16.50	\$ \$ \$ 1,40 \$ \$ 6 \$ \$ 5 \$ \$ 5	6.79 1.87 3.58 02.20 60.98 5.72 54.65	280.00 93.33 93.33 0.00 48.00 48.00 0.00	\$ 1,901.76 \$ 174.72 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 241,351.26 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ - \$ -
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial	\$ \$ \$	11.00 16.50 82.50 11.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 32.20 60.98 5.72 54.65	280.00 93.33 93.33 0.00 48.00 0.00	\$ 1,901.76 \$ 174.72 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 241,351.26 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ - \$ -
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable	\$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 3.58 5.72 5.72 5.44.65 5.50 95.00 27.50 95.00	280.00 93.33 93.33 0.00 48.00 0.00	\$ 1,901.76 \$ 174.73 \$ 333.76 \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 241,351.26 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ - \$ 7,150.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial	\$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 5.20 50.98 5.72 54.65 600st	280.00 93.33 93.33 0.00 48.00 48.00 0.00	\$ 1,901.76 \$ 174.77 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ 7,202.37 \$ 19,308.10 \$ 260,659.30 Total Cost \$ - \$ 5 \$ 7,150.00 \$ -
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50	\$ \$ \$ 1,40 \$ \$ 60 \$ \$ 5 \$ \$ 60 \$ \$ 60	6.79 1.87 3.58 3.58 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5	280.00 93.33 93.33 0.00 48.00 0.00	\$ 1,901.76 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ 7,150.00 \$ - \$ 7,150.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole	\$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50	\$ \$ \$ 1,40 \$ \$ 60 \$ \$ 5 \$ \$ 60 \$ \$ 60	6.79 1.87 3.58 5.20 50.98 5.72 54.65 600st	280.00 93.33 93.33 0.00 48.00 48.00 0.00	\$ 1,901.76 \$ 174.77 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ 7,202.37 \$ 19,308.10 \$ 260,659.30 Total Cost \$ - \$ 5 \$ 7,150.00 \$ -
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.28 3.28 3.28 3.58 3.58 3.58 3.58 5.72 54.65 55.00 32.50 55.00 55.00 65.00	280.00 93.33 93.33 0.00 48.00 48.00 0.00	\$ 1,901.76 \$ 174.73 \$ 333.76 \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 241,351.26 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ 7,150.00 \$ 7,150.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Casle	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 3.58 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5	280.00 93.33 93.33 0.00 48.00 48.00 0.00	\$ 1,901.76 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ 7,150.00 \$ - \$ 7,150.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water	***	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	\$ \$ \$ 1,40 \$ \$ \$ 5 \$ \$ 5 \$ \$ 60 \$ 60	6.79 1.87 3.58 3.58 5.00 8.098 5.72 9.44.65 6.008 6.000 6.000	280.00 93.33 93.33 0.00 48.00 48.00 0.00	\$ 1,901.76 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 241,351.26 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ 7,150.00 \$ 7,150.00 \$ - \$ 7,150.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Casle Aerian	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	\$ \$ \$ 1,40 \$ \$ 60 \$ \$ 5 \$ \$ 60 \$ 60	6.79 1.87 3.28 3.28 3.28 3.58 3.58 3.58 3.58 5.72 54.65 55.00 32.50 55.00 55.00 65.00	280.00 93.33 93.33 0.00 48.00 48.00 0.00	\$ 1,901.76 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 241,351.26 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ 7,150.00 \$ 7,150.00 \$ - \$ 7,150.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main	***	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	\$ \$ \$ 1,400 \$ \$ 5 \$ \$ 5 \$ \$ 600 \$ \$ 60	6.79 1.87 3.58 3.58 5.72 3.09 5.72 3.4.65 60st 60st 655.00 655.00 655.00 655.00 655.00 655.00 655.00 655.00 655.00	280.00 93.33 93.33 0.00 48.00 48.00 0.00	\$ 1,901.76 \$ 333.76 \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 241,351.26 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ 7,150.00 \$ 7,150.00 \$ - \$ 7,150.00 \$ - \$ 11,000.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA)	***	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	\$ \$ \$ 1,400 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 3.58 5.72 3.09 5.72 3.4.65 60st 60st 655.00 655.00 655.00 655.00 655.00 655.00 655.00 655.00 655.00	280.00 93.33 93.33 0.00 48.00 48.00 0.00 Amount  0.00  100.00	\$ 1,901.76 \$ 174.73 \$ 333.76 \$ 2,927.23 \$ 274.73 \$ 7,202.33 \$ 241,351.26 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ 7,150.00 \$ 7,150.00 \$ - \$ 11,000.00 \$ -
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried	***	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	\$ \$ \$ 1,400 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 3.58 5.72 54.65 55.00 32.50 55.00 27.50 55.00 27.50 55.00 33.50 93.50	280.00 93.33 93.33 0.00 48.00 48.00 0.00 Amount  0.00  100.00  100.00  0.00	\$ 1,901.76 \$ 174.73 \$ 333.76 \$ 2,927.23 \$ 274.73 \$ 7,202.33 \$ 241,351.26 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ 7,150.00 \$ 7,150.00 \$ - \$ 11,000.00 \$ -
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total	***	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	\$ \$ 1,40 \$ \$ 6 \$ \$ 5 \$ 5 \$ 5 \$ 6 \$ 5 \$ 7 \$ 7 \$ 8 \$ 7 \$ 8 \$ 8 \$ 8 \$ 8 \$ 8 \$ 8 \$ 8 \$ 8 \$ 8 \$ 8	6.79 1.87 3.58 3.58 5.72 54.65 55.00 32.50 55.00 27.50 55.00 27.50 55.00 33.50 93.50	280.00 93.33 93.33 0.00 48.00 48.00 0.00  100.00  100.00 0.00 0.00 0.00	\$ 1,901.76 \$ 174.72 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 241,351.26 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ 7,150.00 \$ 7,150.00 \$ 11,000.00 \$ - \$ 25,300.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total  Right of Way (Sq Ft)	***	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 3.58 20.20 60.98 5.72 54.65 55.00 60.55.00 60.55.00 60.50 60.00 60.00 60.00 60.00 60.00 60.00 60.00 60.00 60.00 60.00 60.00 60.00	280.00 93.33 93.33 0.00 48.00 48.00 0.00  Amount  0.00  100.00  100.00  Sq Ft	\$ 1,901.76 \$ 174.72 \$ 333.76 \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 241,351.26 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ 7,150.00 \$ 7,150.00 \$ - \$ 11,000.00 \$ 11,000.00 \$ 25,300.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total	***	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 3.58 5.72 54.65 55.00 32.50 55.00 27.50 55.00 27.50 55.00 33.50 93.50	280.00 93.33 93.33 0.00 48.00 48.00 0.00  100.00  100.00 0.00 0.00 0.00	\$ 1,901.76 \$ 174.72 \$ 333.76 \$ - \$ 2,927.23 \$ 274.75 \$ 7,202.33 \$ 241,351.26 \$ 19,308.10 \$ 260,659.36 Total Cost \$ - \$ 7,150.00 \$ 7,150.00 \$ 11,000.00 \$ - \$ 25,300.00

General In	formation	Мар
Project ID		
Street Name	120 Deer Forest Trail	
Site Visit Date	5/21/13	Oak Rd Ceda r Td
Road Classification	Minor road	Pipe To alled Moming Creek
Project		PINETO JPH MING Creek
Urban Typical Section with Valley (		4 17 11 17
Cidair Typical Collect Mair Valley		Huntell Ct
		Downing Co
		The second secon
		Gende Q Jan Oct Milk
Field I	Notes	and the second s
Design (Existing	g Site Features)	TO WEST OF THE STATE OF THE STA
Existing Road Laneage	2 - 12'	Herby Hill  Com Variety Hill
Existing Shld Width (paved and		
Existing Side Slopes	Flat	Hills dasks DF =
Existing Guardrail	None	z eferichave
Depth fm Pavement to Top of Cu		Aromough Rd
Pipe Type and Size	36" CMP,100'	Medicinopandy Big
Pipe Condition (1-5) (1 is new)	5 a downstroom side active	2 3
Condition Notes: Headwall failed o	n downstream side, active	To The second se
erosion, effectively 0% capacity		Scoler Ave
Pavement Type/Condition	Asphalt/Good	
Pavement Type/Condition	Aspnaii/Good	Stage Construction Options
Environmen	tal Features	Close Location to Traffic X
Wetlands	None	Maintain One Lane - No Temp Pavement
Ditches	None	Maintain One Lane - Temp Pavement
Dittiles	140110	Stage Construction Notes:
		otago conditudion riotes.
Utilities (Visua	al Inspection)	
Electric	Buried	
Cable	Buried	
Phone	Buried	
Gas		
Water	Buried	
Sewer		
Other		
	Propose	ed Design
Roadway Section		
	4 4001	
Culvert Size & Material		Cost of removing headwalls assumed equal to removal of entire length
	of pipe.	
Utility Relocations	Electric, cable, phone, water	
Guardrail Replacement		
Miscellaneous Features		
		ost Estimate
Туре	Notes	
Design	Includes 10% Construction Co	
Right of Way Cost	Assuming project extends 3	
Utility Relocation Cost	Buried util	
Construction Cost	Assuming 1/10 acre clea	
Environmental Permits	Assuming minimal environme	ental permitting required \$10,000
	= =	A44 700
	Total P	anning Estimate \$145,508







Photo 1:



Photo 2:

5/21/2013

Taken By:

David King

Page:





Photo 3:



Photo 4:

5/21/2013

Taken By:

David King

Page:

Roadway Construction	Removal Uni	t Cost	Installation Unit Cost	Amount	Total Cost
Pavement (SF)	\$	0.73	\$ 4.87		
Curb and Gutter (LF)	\$	28.56	\$ 30.60		
Drain Inlet (EA)	_		\$ 3,000.00		
4" Sidewalk (SY)	\$	13.56	\$ 36.90		
Guardrail (LF)	\$	4.88	\$ 49.09 \$ 1,380.00		
End Anchorage (EA) Subtotal			Ψ 1,300.00	0.00	\$ 1,990.37
					• .,
Grading Complete (5% of Rwy Items & Drng Total \$)					\$ 3,158.26
Roadway Total					\$ 5,148.63
Drainage	Removal Uni	t Cost	Installation Unit Cost	Amount	Total Cost
Trench Excavation (CY)			\$ 10.38		\$ 1,384.00
36" CMP (LF)	\$	19.62			\$11,772.00
36" RCP			\$ 142.52		
Class A Conc (CY)			\$ 892.19 \$ 1.42		\$ 39,800.51 \$ 6,081.72
Steel (lb) Pipe Bedding (CY)			\$ 48.60		\$ 1,103.22
Trench Backfill (CY)			\$ 2.99		
Trench Compaction (CY)			\$ 6.36		
Drainage Total					\$61,174.91
·			lestaller's 11 '' O	A == : :	
Signing and Marking  Permanent Strining (LE)			Installation Unit Cost	Amount	Total Cost \$ -
Permanent Striping (LF)			\$ 0.71	0.00	φ -
Signing and Marking Total					\$ -
Staging			Installation Unit Cost	Amount	Total Cost
Staging Clearing and Grubbing (Acre)			\$ 10,260.00		\$ 1,026.00
Temporary Pavement			*,		\$ -
Temporary Drainage (Stream Diversion)			\$ 4,428.00	1.00	\$ 4,428.00
Staging Total					\$ 5,454.00
Staging Total					ψ 3,434.00
Erosion Control			Installation Unit Cost	Amount	Total Cost
Fine Grading and Seeding (SY)			\$ 4.39		
Temporary Grassing (AC)			\$ 855.60		
Type C Silt Fence (LF)			\$ 4.24	400.00	\$ 1,694.40
Check Dam Type C Silt Fence (LF)			\$ 6.79		\$ 2,716.80
Erosion Control Mats (SY)			\$ 1.87		
Landscape Mulch (SY)			\$ 3.58		
Perm Grassing (AC) Rip Rap Type 3 12" (SY)			\$ 1,402.20 \$ 60.98		
Plastic Filter Fabric (SY)			\$ 5.72		
4" Ditch Paving (SY)			\$ 54.65		
Erosion Control Total					
					\$ 6 427 46
					\$ 6,427.46
Construction Cost Total					\$78,204.99
Traffic Control (8% of Construction Total \$)					
					\$78,204.99
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation	Removal Uni	t Cost	Installation Unit Cost	Amount	\$78,204.99 \$6,256.40
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric					\$78,204.99 \$ 6,256.40 \$84,461.39 Total Cost
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial	\$	11.00	\$ 55.00		\$78,204.99 \$6,256.40 \$84,461.39 Total Cost \$-
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried	\$ \$	11.00 16.50	\$ 55.00 \$ 82.50	50.00	\$78,204.99 \$6,256.40 \$84,461.39 Total Cost \$- \$4,950.00
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial	\$	11.00	\$ 55.00	50.00	\$78,204.99 \$6,256.40 \$84,461.39 Total Cost \$-
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole	\$ \$	11.00 16.50	\$ 55.00 \$ 82.50	50.00	\$78,204.99 \$6,256.40 \$84,461.39 Total Cost \$- \$4,950.00
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone	\$ \$ \$	11.00 16.50 82.50	\$ 55.00 \$ 82.50 \$ 605.00	50.00	\$ 78,204.99 \$ 6,256.40 \$ 84,461.39 Total Cost \$ - \$ 4,950.00 \$ -
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Wooden Pole Wooden Pole	\$ \$ \$	11.00 16.50 82.50	\$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50	50.00 50.00	\$ 78,204.99 \$ 6,256.40 \$ 84,461.39 Total Cost \$ - \$ 4,950.00 \$ -
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable	\$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50	\$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00	50.00	\$ 78,204.99 \$ 6,256.40 \$ 84,461.39 Total Cost \$ - \$ 4,950.00 \$ - \$ 3,575.00 \$ -
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Cable Aerial	\$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50	\$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 27.50	50.00	\$ 78,204.99 \$ 6,256.40 \$ 84,461.39 Total Cost \$ - \$ 4,950.00 \$ - \$ 3,575.00 \$ - \$ -
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Cable Aerial Buried	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50	\$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 27.50 \$ 55.00	50.00 50.00	\$ 78,204.99 \$ 6,256.40 \$ 84,461.39 Total Cost \$ - \$ 4,950.00 \$ - \$ 3,575.00 \$ - \$ 3,575.00
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Cable Aerial	\$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50	\$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 27.50	50.00 50.00	\$ 78,204.99 \$ 6,256.40 \$ 84,461.39 Total Cost \$ - \$ 4,950.00 \$ - \$ 3,575.00 \$ - \$ -
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50	\$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 27.50 \$ 55.00	50.00 50.00 50.00	\$ 78,204.99 \$ 6,256.40 \$ 84,461.39 Total Cost \$ - \$ 4,950.00 \$ - \$ 3,575.00 \$ - \$ 3,575.00
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	\$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 66.00 \$ 66.00	50.00 50.00 50.00	\$ 78,204.99 \$ 6,256.40 \$ 84,461.39 Total Cost \$ - \$ 4,950.00 \$ - \$ 3,575.00 \$ - \$ 3,575.00 \$ - \$ 3,575.00
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	\$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 66.00 \$ 93.50	50.00 50.00 50.00	\$ 78,204.99 \$ 6,256.40 \$ 84,461.39 Total Cost \$ - \$ 4,950.00 \$ - \$ 3,575.00 \$ - \$ 3,575.00 \$ - \$ 5,500.00
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	\$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 66.00 \$ 66.00	50.00 50.00 50.00	\$ 78,204.99 \$ 6,256.40 \$ 84,461.39 Total Cost \$ - \$ 4,950.00 \$ - \$ 3,575.00 \$ - \$ 3,575.00 \$ - \$ 3,575.00
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	\$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 66.00 \$ 93.50	50.00 50.00 50.00 50.00	\$ 78,204.99 \$ 6,256.40 \$ 84,461.39 Total Cost \$ 4,950.00 \$ - \$ 3,575.00 \$ - \$ 3,575.00 \$ - \$ 5,500.00 \$ - \$ 5,500.00
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	\$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 605.00 \$ 66.00	50.00 50.00 50.00 50.00	\$ 78,204.99 \$ 6,256.40 \$ 84,461.39 Total Cost \$ - \$ 4,950.00 \$ - \$ 3,575.00 \$ - \$ 3,575.00 \$ - \$ 3,575.00 \$ - \$ 3,575.00
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total  Right of Way (Sq Ft)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	\$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 605.00 \$ 605.00 \$ 66.00 \$ 93.50 \$ 2,609.22 \$ 82.50	50.00 50.00 50.00 0.00 0.00 Sq Ft	\$ 78,204.99 \$ 6,256.40 \$ 84,461.39  Total Cost \$ - \$ 4,950.00 \$ - \$ 3,575.00 \$ - \$ 3,575.00 \$ - \$ 5,500.00 \$ - \$ 17,600.00  Total Cost
Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	\$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 605.00 \$ 605.00 \$ 66.00 \$ 93.50 \$ 2,609.22 \$ 82.50	50.00 50.00 50.00 0.00 0.00	\$ 78,204.99 \$ 6,256.40 \$ 84,461.39 Total Cost \$ 4,950.00 \$ - \$ 3,575.00 \$ - \$ 3,575.00 \$ - \$ 5,500.00 \$ - \$ 17,600.00

General In	formation		Мар
Project ID			N I I I I I I I I I I I I I I I I I I I
Street Name	Dogwood Trail	1 1 2 tule Po	SanoyLake Or
Site Visit Date	5/22/13	Same A	Sin Rd
Road Classification	Minor arterial	5 1 1	X - 1 / 180
Project			a rangon
Rural Typical Section		Clear wood Art	Por State of
Field I		1 1 1	4) /// (4)
Design (Existing	g Site Features)	100	July 1
Existing Road Laneage	2-12'	a tailote	ApabnDr
Existing ShId Width (paved and o	grass) (feet) 1' - 2'		Aspentiva 9
Existing Side Slopes	1.5:1	17 18	Competer Company
Existing Guardrail	None	43613	Loyd Rd
Depth fm Pavement to Top of Cu		(354) J	
Pipe Type and Size	2-120" CMP	100	Glover to
Pipe Condition (1-5) (1 is new)	4	1 world The Gall	13 13
Condition Notes: Large down strea flood plain; bottom of pipe rusted th			Dan and & Landing
Pavement Type/Condition	Asphalt/Good		
			e Construction Options
Environmen		Close Location to Traff	7.
Wetlands	None	Maintain One Lane - No	
Ditches	Noted	Maintain One Lane - Te	
		Stage Construction Note	es:
Utilities (Visua			
Electric	Aerial		
Cable	Aerial		
Phone	Aerial		
Gas			
Water	Buried		
Sewer	Buried		
Other			
	Propose	ed Design	
Roadway Section	1.:		
Culvert Size & Material	triple 7' x 7' box, concrete, 80' len		
Utility Relocations	Electric, cable, phone, water, sewer		
Guardrail Replacement	Need Guardrail due to side slopes and culvert installation		
Miscellaneous Features	Zone AE Floodplain and Floodwa	y Analysis required	
	Planning C	Cost Estimate	
Туре	Notes		Total
Design	Includes 10% Construction Co		\$55,456
Right of Way Cost	Assuming project extends 1		\$55,600
Utility Relocation Cost	Aerial and burie	ed utilities	\$37,263

Assuming 1/5 acre clearing and grubbing Permits, Zone AE flood study

**Total Planning Estimate** 

\$429,561

\$18,000

\$595,879



**Construction Cost** 

**Environmental Permits** 





Photo 1:



Photo 2:

5/21/2013

Taken By:

David King

Page:





Photo 3:



Photo 4:

5/21/2013

Taken By:

David King

Page:

Roadway Construction	Removal U	nit Cost	Installation Unit Cost	Amount	Total Cost
Pavement (SF)	\$	0.73	\$ 4.87		
Curb and Gutter (LF)	\$	28.56	\$ 30.60		
Drain Inlet (EA)	•	20.00	\$ 3,000.00		
4" Sidewalk (SY)	\$	13.56	\$ 36.90		
Guardrail (LF)	\$	4.88	\$ 49.09	600.00	\$ 32,385.60
End Anchorage (EA)	•		\$ 1,380.00		
Subtotal					\$ 44,093.89
Grading Complete (5% of Rwy Items & Drng Total \$)					\$ 17,795.14
Roadway Total					\$ 61,889.03
Drainage	Removal U	nit Cost	Installation Unit Cost	Amount	Total Cost
Trench Excavation (CY)			\$ 10.38		
120" CMP (LF)	\$	90.00		160.00	\$ 43,200.00
120" RCP			\$ 142.52	0.00	\$ -
Class A Conc (CY)			\$ 892.19		\$189,679.17
Steel (lb)					\$ 33,832.49
Pipe Bedding (CY)			\$ 48.60		
Trench Backfill (CY)			\$ 2.99 \$ 6.36	,	. ,
Trench Compaction (CY)			\$ 6.36	1,956.54	\$ 12,456.31
Drainage Total					\$311,808.96
Signing and Marking			Installation Unit Cost	Amount	Total Cost
Permanent Striping (LF)			\$ 0.71	92.00	\$ 65.14
Signing and Marking Total					\$ 65.14
Staging			Installation Unit Cost	Amount	Total Cost
Clearing and Grubbing (Acre)			\$ 10,260.00		\$ 2,052.00
Temporary Gravel Road (SY)			\$ 15.42	0.00	
Temporary Drainage (Stream Diversion)			\$ 4,428.00	2.00	\$ 8,856.00
Staging Total					\$ 11,038.27
otaging rotal					ψ 11,000.21
Erosion Control			Installation Unit Cost	Amount	Total Cost
Fine Grading and Seeding (SY)			\$ 4.39		
Temporary Grassing (AC)			\$ 855.60	0.00	
Type C Silt Fence (LF)			\$ 4.24	640.00	\$ 2,711.04
Check Dam Type C Silt Fence (LF)			\$ 6.79		. ,
Erosion Control Mats (SY)			\$ 1.87		
Landscape Mulch (SY)			\$ 3.58		
Perm Grassing (AC)			\$ 1,402.20 \$ 60.98		
Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY)			\$ 60.98 \$ 5.72		
4" Ditch Paving (SY)			\$ 54.65		
			•		
Erosion Control Total					\$ 12,940.13
Construction Cost Total					\$397,741.53
Traffic Control (8% of Construction Total \$)					\$ 31,819.32
Construction Cost Grand Total					\$429,560.85
Utility Relocation	Removal U	nit Cost	Installation Unit Cost	Amount	Total Cost
Electric					
Aerial	\$	11.00	\$ 55.00		
Buried	\$	16.50	\$ 82.50		
Wooden Pole Phone	\$	82.50	\$ 605.00	3.00	\$ 2,062.50
Aerial	\$	11.00	\$ 27.50	100.00	\$ 3,850.00
Buried	\$	16.50	\$ 55.00		
Wooden Pole	\$	82.50	\$ 605.00		\$ -
Cable					
Aerial	\$	11.00	\$ 27.50		
Buried	\$	16.50	\$ 55.00		
Wooden Pole	\$	82.50	\$ 605.00		\$ -
Gas 4" main	\$	16 FO	\$ 66.00		¢
Water	φ	16.50	\$ 66.00		\$ -
8" main	\$	16.50	\$ 93.50	100.00	\$ 11,000.00
Relocate Fire Hydrant (EA)	•	. 5.00	\$ 2,609.22		\$ -
Sewer			, -	0.00	
12" main	\$	16.50	\$ 82.50	100.00	
Utility Relocation Total					\$ 37,262.50
Right of Way (Sq Ft)			Cost/ Sq Ft	Sq Ft	Total Cost
			•	•	
Permanent Easement			\$ 4.00	13,900.00	\$ 55.600.00
Permanent Easement ROW Total			\$ 4.00	13,900.00	\$ 55,600.00 \$ 55,600.00

General In	formation	Мар
Project ID	- Inianon	ιιιαρ
	400 Margadas Trail	174 7 7 8 6 7 8 6
Street Name	120 Mercedes Trail	The state of the s
Site Visit Date	5/22/13	Nauma de de
Road Classification Project	Internal Local	Mayen o Ba
•		Lang Rd & Kita Lake Rd
Urban typical with valley gutter; sub	Daivision street	
		Total S. S. Cont.
		Neuring de
Field I		The resident Thomas Co.
Design (Existing	g Site Features)	PValle So X
Existing Road Laneage	2-12'	Register Rd Register Rd
Existing Shld Width (paved and o		Benes ar
Existing Side Slopes	flat	
Existing Guardrail	none	
Depth fm Pavement to Top of Cu	` '	Seet For
Pipe Type and Size	(ellip. CMP) 2-48"x72";55'	Come & E
Pipe Condition (1-5) (1 is new) Condition Notes: Both up to 25% b	locked structurally unsound sag	General Se White Cak Vay
in top of pipe, debris/rip rap in pipe		THE WAS TO WE
in top or pipe, debits/fip tap in pipe		
Pavement Type/Condition	Asphalt/Good	
	/ topriary cood	Stage Construction Options
Environmen	tal Features	Close Location to Traffic
Wetlands	None	Maintain One Lane - No Temp Pavement X
Ditches	None	Maintain One Lane - Temp Pavement
		Stage Construction Notes:
Utilities (Visua		
Electric	Buried	
Cable	Buried	
Phone	Buried	
Gas Water	Buried	
Sewer	Bulled	
Other		
Other	Proposi	ed Design
Roadway Section		
Culvert Size 9 Meterial	dbl 8' x 4' box, concrete, 60' length	n. Cost of eliptical pipe removal assumed to equal to removal of round
Culvert Size & Material	60" CMP.	
Utility Relocations	Electric, cable, phone, water	
- Tologations		
Guardrail Replacement		
•		
Miscellaneous Features		
	Planning C	ost Estimate
Туре	Notes	
Design	Includes 10% Construction Co	
Right of Way Cost	Assuming project extends 2	
Utility Relocation Cost	Buried util	
Construction Cost	Assuming 1/5 acre clea	
Environmental Permits	Assuming minimal environme	ental permitting required \$10,000

Total Planning Estimate

\$224,070



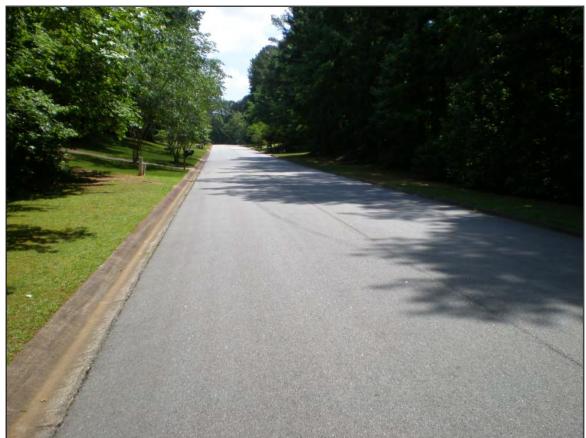




Photo 1:



Photo 2:

**Photo Date:** 

5/21/2013

Taken By:

David King

Page:





Photo 3:



Photo 4:

Photo Date:

5/21/2013

Taken By:

David King

Page:

Roadway Construction	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Pavement (SF) Curb and Gutter (LF)	\$ 0.73 \$ 28.50			\$ 2,421.50 \$ 2.129.76
Drain Inlet (EA)	φ 26.50	\$ 3,000.00		. ,
4" Sidewalk (SY)	\$ 13.50			
Guardrail (LF)	\$ 4.88			
End Anchorage (EA)	,	\$ 1,380.00		
Subtotal				\$ 4,551.26
Grading Complete (5% of Rwy Items & Drng Total \$)				\$ 6,723.90
Roadway Total				\$ 11,275.17
Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Trench Excavation (CY)	rtomoval onli oost	\$ 10.38		
60" CMP (LF)	\$ 24.60		110.00	
60" RCP		\$ 259.20	0.00	\$ -
Class A Conc (CY)		\$ 892.19		\$ 96,499.05
Steel (lb)		\$ 1.42		\$ 15,833.71
Pipe Bedding (CY)		\$ 48.60		
Trench Backfill (CY)		\$ 2.99 \$ 6.36		
Trench Compaction (CY)		φ 0.30	320.50	\$ 2,089.64
Drainage Total				\$ 129,926.76
Signing and Marking		Installation Unit Cost	Amount	Total Cost
Permanent Striping (LF)		\$ 0.71	72.00	\$ 50.98
Signing and Marking Total				¢ 50.00
Signing and Marking Total				\$ 50.98
Staging		Installation Unit Cost	Amount	Total Cost
Clearing and Grubbing (Acre)		\$ 10,260.00	0.20	\$ 2,052.00
Temporary Pavement				\$ -
Temporary Drainage (Stream Diversion)		\$ 4,428.00	1.00	\$ 4,428.00
Staging Total				\$ 6,581.95
Erosion Control		Installation Unit Cost	Amount	Total Cost
Fine Grading and Seeding (SY)		\$ 4.39	72.00	\$ 316.22
Temporary Grassing (AC)		\$ 855.60		
Type C Silt Fence (LF)		\$ 4.24		
Check Dam Type C Silt Fence (LF)		\$ 6.79	240.00	\$ 1,630.08
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY)		\$ 6.79 \$ 1.87	240.00 80.00	\$ 1,630.08 \$ 149.76
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY)		\$ 6.79 \$ 1.87 \$ 3.58	240.00 80.00 80.00	\$ 1,630.08 \$ 149.76 \$ 286.08
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC)		\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20	240.00 80.00 80.00 0 0.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ -
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY)		\$ 6.79 \$ 1.87 \$ 3.58	240.00 80.00 80.00 0 0.00 8 48.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ -
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY)		\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98	240.00 80.00 80.00 0.00 48.00 48.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ - \$ 2,927.23 \$ 274.75
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY)		\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	240.00 80.00 80.00 0 0.00 48.00 48.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ - \$ 2,927.23 \$ 274.75
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total		\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	240.00 80.00 80.00 0 0.00 48.00 48.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ - \$ 2,927.23 \$ 274.75 \$ - \$ 6,600.77
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total		\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	240.00 80.00 80.00 0 0.00 48.00 48.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)		\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	240.00 80.00 80.00 0 0.00 48.00 48.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ - \$ 2,927.23 \$ 274.75 \$ - \$ 6,600.77
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total		\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	240.00 80.00 80.00 0.00 48.00 48.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total Traffic Control (8% of Construction Total \$) Construction Cost Grand Total Utility Relocation	Removal Unit Cost	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72	240.00 80.00 80.00 0.00 48.00 48.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric		\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.22 \$ 60.98 \$ 5.72 \$ 54.65	240.00 8 80.00 0 0.00 8 48.00 2 48.00 0 0.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial	\$ 11.00	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.22 \$ 60.98 \$ 5.72 \$ 54.65	240.00 80.00 0 0.00 0 48.00 2 48.00 0 0.00 Amount	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried	\$ 11.00 \$ 16.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65	240.00 80.00 80.00 0 0.00 8 48.00 2 48.00 0 0.00 Amount	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole	\$ 11.00	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65	240.00 80.00 80.00 0 0.00 8 48.00 2 48.00 0 0.00 Amount	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried	\$ 11.00 \$ 16.50 \$ 82.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost 0 \$ 55.00 0 \$ 605.00	240.00 8 80.00 0 0.00 48.00 2 48.00 0 0.00 Amount	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone	\$ 11.00 \$ 16.50 \$ 82.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.22 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost 0 \$ 55.00 0 \$ 82.50 0 \$ 605.00 0 \$ 27.50	240.00 8 80.00 9 0.00 9 48.00 2 48.00 0 0.00 Amount	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$ - \$ 4,950.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial	\$ 11.00 \$ 16.50 \$ 82.50 \$ 11.00	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.22 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost 0 \$ 55.00 0 \$ 82.50 0 \$ 605.00 0 \$ 27.50 0 \$ 55.00	240.00 80.00 80.00 0 0.00 8 48.00 2 48.00 0 0.00 Amount	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable	\$ 11.00 \$ 16.50 \$ 82.50 \$ 11.00 \$ 16.50 \$ 82.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost 0 \$ 55.00 0 \$ 605.00 0 \$ 605.00	240.00 8 80.00 0 0.00 48.00 2 48.00 0 0.00 Amount 5 50.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$ \$ 4,950.00 \$ \$ 3,575.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial	\$ 11.00 \$ 16.51 \$ 82.50 \$ 11.00 \$ 16.55 \$ 82.56 \$ 11.00	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.22 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost 0 \$ 55.00 0 \$ 82.50 0 \$ 605.00 0 \$ 27.50 0 \$ 605.00 0 \$ 27.50	Amount  50.00  50.00  50.00  50.00  50.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$ 4,950.00 \$ 3,575.00 \$ 5
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried	\$ 11.00 \$ 16.50 \$ 82.50 \$ 11.00 \$ 16.50 \$ 82.50 \$ 11.00 \$ 16.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.22 \$ 60.98 \$ 5.77 \$ 54.65 Installation Unit Cost 0 \$ 55.00 0 \$ 82.50 0 \$ 605.00 0 \$ 27.50 0 \$ 605.00 0 \$ 55.00 0 \$ 605.00	Amount  50.00  Amount  50.00  50.00  50.00  50.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$ 4,950.00 \$ 5 \$ 3,575.00 \$ 3,575.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Wooden Pole Oden Pole Cable Aerial Buried Wooden Pole	\$ 11.00 \$ 16.51 \$ 82.50 \$ 11.00 \$ 16.55 \$ 82.56 \$ 11.00	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.22 \$ 60.98 \$ 5.77 \$ 54.65 Installation Unit Cost 0 \$ 55.00 0 \$ 82.50 0 \$ 605.00 0 \$ 27.50 0 \$ 605.00 0 \$ 55.00 0 \$ 55.00	Amount  50.00  Amount  50.00  50.00  50.00  50.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$ 4,950.00 \$ 3,575.00 \$ 5
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried	\$ 11.00 \$ 16.50 \$ 82.50 \$ 11.00 \$ 16.50 \$ 82.50 \$ 16.50 \$ 82.50	\$ 6.75 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost 0 \$ 55.00 0 \$ 605.00 0 \$ 27.50 0 \$ 605.00 0 \$ 55.00 0 \$ 605.00	Amount  50.00  Amount  50.00  50.00  50.00  50.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$ 3,575.00 \$ 3,575.00 \$ 3,575.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas	\$ 11.00 \$ 16.51 \$ 82.50 \$ 11.00 \$ 16.50 \$ 82.50 \$ 11.00 \$ 16.55 \$ 82.50	\$ 6.75 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost 0 \$ 55.00 0 \$ 605.00 0 \$ 27.50 0 \$ 605.00 0 \$ 55.00 0 \$ 605.00	Amount  50.00  Amount  50.00  50.00  50.00  50.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$ 4,950.00 \$ 5 \$ 3,575.00 \$ 3,575.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Casle	\$ 11.00 \$ 16.50 \$ 82.50 \$ 11.00 \$ 16.50 \$ 82.50 \$ 16.50 \$ 82.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.68  Installation Unit Cost 0 \$ 55.00 0 \$ 82.50 0 \$ 605.00 0 \$ 27.50 0 \$ 55.00 0 \$ 605.00 0 \$ 605.00 0 \$ 66.00	Amount  50.00  Amount  50.00  50.00  50.00  50.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$ 3,575.00 \$ 3,575.00 \$ 3,575.00 \$ 3,575.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA)	\$ 11.00 \$ 16.50 \$ 82.50 \$ 11.00 \$ 16.50 \$ 11.00 \$ 16.50 \$ 12.50 \$ 16.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.22 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost 0 \$ 55.00 0 \$ 82.50 0 \$ 605.00 0 \$ 27.50 0 \$ 55.00 0 \$ 605.00 0 \$ 605.00 0 \$ 605.00	Amount  50.00  Amount  50.00  50.00  50.00  50.00  50.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$ - \$ 3,575.00 \$ 3,575.00 \$ - \$ 3,575.00 \$ - \$ 3,575.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Rooden Pole Cable	\$ 11.00 \$ 16.50 \$ 82.50 \$ 11.00 \$ 16.51 \$ 82.50 \$ 11.00 \$ 16.51 \$ 82.50 \$ 16.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.66 \$ 55.00 \$ 82.50 \$ 605.00 \$ \$ 27.50 \$ 55.00 \$ 605.00 \$ \$ 3.50 \$ 605.00 \$ \$ 605.00 \$ 6	Amount  50.00  Amount  50.00  50.00  50.00  50.00  50.00  50.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$ 3,575.00 \$ 3,575.00 \$ 5,500.00 \$ 5
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main	\$ 11.00 \$ 16.50 \$ 82.50 \$ 11.00 \$ 16.50 \$ 11.00 \$ 16.50 \$ 12.50 \$ 16.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.66 \$ 55.00 \$ 82.50 \$ 605.00 \$ \$ 27.50 \$ 55.00 \$ 605.00 \$ \$ 3.50 \$ 605.00 \$ \$ 605.00 \$ 6	Amount  50.00  Amount  50.00  50.00  50.00  50.00  50.00  50.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$ 3,575.00 \$ 3,575.00 \$ 3,575.00 \$ 5,500.00 \$ 5
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Rooden Pole Cable	\$ 11.00 \$ 16.50 \$ 82.50 \$ 11.00 \$ 16.51 \$ 82.50 \$ 11.00 \$ 16.51 \$ 82.50 \$ 16.50	\$ 6.79 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.66 \$ 55.00 \$ 82.50 \$ 605.00 \$ \$ 27.50 \$ 55.00 \$ 605.00 \$ \$ 3.50 \$ 605.00 \$ \$ 605.00 \$ 6	Amount  50.00  Amount  50.00  50.00  50.00  50.00  50.00  50.00	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 6,600.77 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$ 3,575.00 \$ 3,575.00 \$ 3,575.00 \$ 5,500.00 \$ 5
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total  Right of Way (Sq Ft)	\$ 11.00 \$ 16.50 \$ 82.50 \$ 11.00 \$ 16.51 \$ 82.50 \$ 11.00 \$ 16.51 \$ 82.50 \$ 16.50	\$ 6.75 \$ 1.87 \$ 3.56 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.66 \$ 55.00 \$ 82.50 \$ 605.00 \$ 27.50 \$ 55.00 \$ 605.00 \$ 27.50 \$ 55.00 \$ \$ 605.00 \$ 605	Amount  50.00  Amount  50.00  50.00  50.00  50.00  50.00  50.00  Sq Ft	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$ 3,575.00 \$ 3,575.00 \$ 3,575.00 \$ 5,500.00 \$ 17,600.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total	\$ 11.00 \$ 16.50 \$ 82.50 \$ 11.00 \$ 16.51 \$ 82.50 \$ 11.00 \$ 16.51 \$ 82.50 \$ 16.50	\$ 6.75 \$ 1.87 \$ 3.58 \$ 1,402.20 \$ 60.98 \$ 5.72 \$ 54.65 Installation Unit Cost 0 \$ 55.00 0 \$ 82.50 0 \$ 605.00 0 \$ 605.00 0 \$ 66.00 0 \$ 93.50 0 \$ 93.50 0 \$ 93.50 0 \$ 93.50	Amount  50.00  Amount  50.00  50.00  50.00  50.00  50.00  50.00  Sq Ft	\$ 1,630.08 \$ 149.76 \$ 286.08 \$ 274.75 \$ 2,927.23 \$ 274.75 \$ 154,435.62 \$ 12,354.85 \$ 166,790.47 Total Cost \$ 4,950.00 \$ 3,575.00 \$ 3,575.00 \$ 3,575.00 \$ 5,500.00 \$ 17,600.00

General In	formation	Map
Project ID		
Street Name	Morning Dove Dr.	1 61
Site Visit Date	5/21/13	The second secon
	Minor road	Oaks:
Road Classification Project		
Urban typical section valley gutter	inotes	Grag Ave
Orban typical section valley gutter		
		Tradition and the state of the
		Pages Dr g
Field I	Notes	Hurtes Gin
Design (Existing	g Site Features)	Soenic Pass
Existing Road Laneage	2-12'	
Existing Shld Width (paved and o	grass) (feet) 4'	Legiand Of E
Existing Side Slopes	flat	Parran Rd do
Existing Guardrail	none	Lakeland Or Raman Rd Rd Raman Rd
Depth fm Pavement to Top of Cu	Ivert (ft): 2'	Lakepoint Ln 45 San
Pipe Type and Size	1-72", 1-84"	Rtlgawood-GC 1
Pipe Condition (1-5) (1 is new)	4	
Condition Notes:	•	Lekember of
Pavement Type/Condition	Asphalt/Good	MX P/ 1 1 1
r avenient Type/condition	Aspilali/Good	Stage Construction Options
Environmen	tal Features	Close Location to Traffic
Wetlands	None identified	Maintain One Lane - No Temp Pavement
Ditches	None	Maintain One Lane - Temp Road X
Ditories		Stage Construction Notes:
		Approx. 200' of gravel road
		Approx. 200 of graver load
Utilities (Visua	al Inspection)	
Electric	Buried	
Cable	Buried	
Phone	Buried	
Gas	Not Sighted	
Water	Buried	
	Buried	
Sewer	Bulled	
Other	Drawa	Paging Paging
		sed Design coses, temporary road consists of 8" gravel fill
Roadway Section		
Culvert Size & Material	double 10' x 4' box, concrete, 70	length
Utility Relocations	Electric, Cable, Phone, Water, S	ewer
Guardrail Replacement	No	
Miscellaneous Features		
	Planning	Cost Estimate
Туре	Note	
Design	Includes 10% Construction (	
Right of Way Cost	Assuming project does no	
Utility Relocation Cost	Buried u	
Construction Cost	Assuming 1/10 acre cle	
Environmental Permits	Assuming minimal environm	ental permitting required \$10,000
	•	

**Total Planning Estimate** 

\$244,389



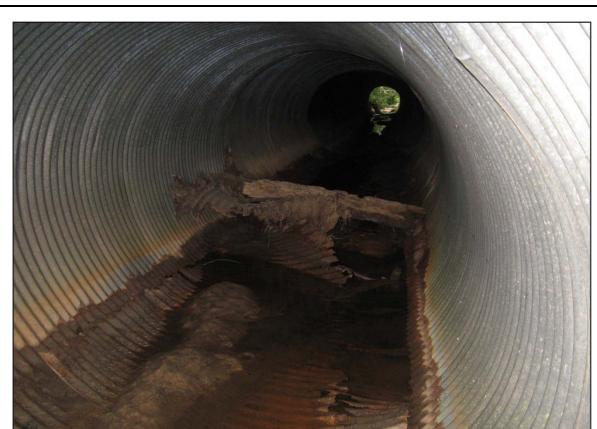




Photo 1:



Photo 2:

5/17/1013

Taken By:

TH

Page:

						_	
Roadway Construction	Removal Unit		Installation Un		Amount		tal Cost
Pavement (SF)	\$	0.73	\$	4.87	528.00	\$	2,959.62
Curb and Gutter (LF)	\$	28.56	\$	30.60		\$	2,603.04
Drain Inlet (EA)	_			3,000.00	0.00		-
4" Sidewalk (SY)	\$	13.56	\$	36.90	0.00		-
Guardrail (LF)	\$	4.88	\$	49.09	0.00		-
End Anchorage (EA)			\$ 1	1,380.00	0.00		
Subtotal						\$	5,562.66
Grading Complete (5% of Rwy Items & Drng Total \$)						\$	6,949.20
5						•	40 =44 00
Roadway Total						\$	12,511.86
Drainaga	Domoval I Init	Cont	Installation I In	it Coot	Amount	Т	tal Coat
Drainage Trench Excavation (CY)	Removal Unit	Cost	Installation Un \$	10.38	570.37		tal Cost
` ,	¢	54.00	Ф	10.30	70.00	\$	5,920.44
72" CMP (LF) 84" CMP		63.00			70.00		3,780.00 4,410.00
Class A Conc (CY)	Ψ	03.00	\$	892.19			95,357.05
Steel (lb)			\$	1.42	11,505.00		16,291.08
Pipe Bedding (CY)			\$	48.60	58.70		2,852.82
Trench Backfill (CY)			\$	2.99	595.60		1,779.64
Trench Compaction (CY)			\$	6.36	476.48		3,030.39
(**)			•			•	-,
Drainage Total						\$ 1	33,421.43
Signing and Marking			Installation Un	it Cost	Amount	To	tal Cost
Permanent Striping (LF)			\$	0.71	0.00	\$	-
Signing and Marking Total						\$	-
Staging			Installation Un		Amount		tal Cost
Clearing and Grubbing (Acre)				0,260.00	0.10		1,026.00
Temporary Gravel Road (SY)			\$	15.42	222.22		3,426.67
Temporary Drainage (Stream Diversion)			\$ 4	1,428.00	1.00	\$	4,428.00
0						•	
Staging Total						\$	8,880.67
Erosion Control			Installation Un	it Cost	Amount	То	tal Cost
Fine Grading and Seeding (SY)			\$	4.39	112.44		493.86
Temporary Grassing (AC)			\$	855.60	0.00		493.00
Type C Silt Fence (LF)			\$	4.24	420.00		1,779.12
Check Dam Type C Silt Fence (LF)			\$	6.79	420.00	\$	2,852.64
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY)			\$ \$	6.79 1.87	420.00 140.00	\$	2,852.64 262.08
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY)			\$ \$ \$	6.79 1.87 3.58	420.00 140.00 140.00	\$ \$ \$	2,852.64
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC)			\$ \$ \$	6.79 1.87 3.58 1,402.20	420.00 140.00 140.00 0.00	\$ \$ \$	2,852.64 262.08 500.64
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY)			\$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98	420.00 140.00 140.00 0.00 58.67	\$ \$ \$ \$	2,852.64 262.08 500.64 - 3,577.73
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY)			\$ \$ \$	6.79 1.87 3.58 1,402.20	420.00 140.00 140.00 0.00	\$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY)			\$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	420.00 140.00 140.00 0.00 58.67 58.67	\$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 - 3,577.73
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY)			\$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	420.00 140.00 140.00 0.00 58.67 58.67	\$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 - 3,577.73
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total			\$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	420.00 140.00 140.00 0.00 58.67 58.67	\$ \$ \$ \$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 - 3,577.73 335.81 - 9,801.87
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)			\$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	420.00 140.00 140.00 0.00 58.67 58.67	\$ \$ \$ \$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 - 3,577.73 335.81
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total			\$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	420.00 140.00 140.00 0.00 58.67 58.67	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 - 3,577.73 335.81 - 9,801.87
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total			\$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	420.00 140.00 140.00 0.00 58.67 58.67	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 - 3,577.73 335.81 - 9,801.87
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)			\$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	420.00 140.00 140.00 0.00 58.67 58.67	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total			\$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	420.00 140.00 140.00 0.00 58.67 58.67	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 - 3,577.73 335.81 - 9,801.87
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)	Removal Unit	Cost	\$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.50 60.98 5.72 54.65	420.00 140.00 140.00 0.00 58.67 58.67	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total		Cost	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ Installation Un	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65	420.00 140.00 140.00 0.00 58.67 58.67 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 3,577.73 335.81 - 9,801.87 164,615.83 13,169.27
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial	\$	11.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.402.20 60.98 5.72 54.65	420.00 140.00 140.00 0.00 58.67 58.67 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 3,577.73 335.81 - 9,801.87 64,615.83 13,169.27 177,785.10 ttal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried	\$ \$	11.00 16.50	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.50 60.98 5.72 54.65 iit Cost 55.00 82.50	420.00 140.00 140.00 0.00 58.67 58.67 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 3,577.73 335.81 - 9,801.87 164,615.83 13,169.27
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole	\$ \$	11.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.402.20 60.98 5.72 54.65	420.00 140.00 140.00 0.00 58.67 58.67 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 3,577.73 335.81 - 9,801.87 64,615.83 13,169.27 177,785.10 ttal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone	\$ \$ \$	11.00 16.50 82.50	s s s s s s s	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65 iit Cost 55.00 82.50 605.00	420.00 140.00 140.00 0.00 58.67 58.67 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 3,577.73 335.81 - 9,801.87 64,615.83 13,169.27 177,785.10 ttal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial	\$ \$ \$	11.00 16.50 82.50 11.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65 iit Cost 55.00 82.50 605.00 27.50	420.00 140.00 140.00 0.00 58.67 58.67 0.00 Amount	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 77,785.10 ttal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried	\$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50	s s s s s s s s s s s s s s s s s s s	6.79 1.87 3.402.20 60.98 5.72 54.65 iit Cost 55.00 82.50 605.00 27.50 55.00	420.00 140.00 140.00 0.00 58.67 58.67 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 3,577.73 335.81 - 9,801.87 64,615.83 13,169.27 177,785.10 ttal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Wooden Pole Wooden Pole	\$ \$ \$ \$	11.00 16.50 82.50 11.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65 iit Cost 55.00 82.50 605.00 27.50	420.00 140.00 140.00 0.00 58.67 58.67 0.00 Amount	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 77,785.10 ttal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable	\$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50	Installation Unss	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 55.00 605.00	420.00 140.00 140.00 0.00 58.67 58.67 0.00 Amount	\$\$\$\$\$\$\$\$\$\$ \$\$1 \$\$5 \$\$5 \$\$5	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 77,785.10 ttal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial  Wooden Pole Cable Aerial	\$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00	S S S S S S S S S S S S S S S S S S S	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 605.00 27.50	420.00 140.00 140.00 0.00 58.67 58.67 0.00 Amount 75.00	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 77,785.10 ttal Cost 7,425.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50	S S S S S S S S S S S S S S S S S S S	6.79 1.87 3.402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 55.00 605.00	420.00 140.00 140.00 0.00 58.67 58.67 0.00 Amount	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 77,785.10 ttal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00	S S S S S S S S S S S S S S S S S S S	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 605.00 27.50	420.00 140.00 140.00 0.00 58.67 58.67 0.00 Amount 75.00	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 77,785.10 ttal Cost 7,425.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	Installation Unss	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 55.00 605.00 605.00	420.00 140.00 140.00 0.00 58.67 58.67 0.00 Amount 75.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 77,785.10 ttal Cost 7,425.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50	S S S S S S S S S S S S S S S S S S S	6.79 1.87 3.402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 55.00 605.00	420.00 140.00 140.00 0.00 58.67 58.67 0.00 Amount 75.00	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 77,785.10 ttal Cost 7,425.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	Installation Unss	6.79 1.87 3.88 1,402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 55.00 605.00 66.00	420.00 140.00 140.00 0.00 0.00 58.67 58.67 0.00  Amount 75.00 75.00	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 77,785.10 ttal Cost 7,425.00 5,362.50
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	S S S S S S S S S S S S S S S S S S S	6.79 1.87 3.402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 605.00 93.50	420.00 140.00 140.00 0.00 58.67 58.67 0.00 Amount 75.00	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 77,785.10 ttal Cost 7,425.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	Installation Unss	6.79 1.87 3.88 1,402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 55.00 605.00 66.00	420.00 140.00 140.00 0.00 58.67 58.67 0.00  Amount 75.00 75.00	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 77,785.10 ttal Cost 7,425.00 5,362.50
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Reiccate Fire Hydrant (EA) Sewer	***	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	Installation Uni  \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 55.00 605.00 605.00 600.00 93.50 2,609.22	420.00 140.00 140.00 0.00 58.67 58.67 0.00  Amount 75.00 75.00 75.00	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 777,785.10 ttal Cost 7,425.00 5,362.50
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Fole Cable Aerial	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	S S S S S S S S S S S S S S S S S S S	6.79 1.87 3.402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 605.00 93.50	420.00 140.00 140.00 0.00 58.67 58.67 0.00  Amount 75.00 75.00	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 77,785.10 ttal Cost 7,425.00 5,362.50 5,362.50
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Reiccate Fire Hydrant (EA) Sewer	***	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	Installation Uni  \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 55.00 605.00 605.00 600.00 93.50 2,609.22	420.00 140.00 140.00 0.00 58.67 58.67 0.00  Amount 75.00 75.00 75.00	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 777,785.10 ttal Cost 7,425.00 5,362.50
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Fole Cable Aerial	***	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	Installation Uni  \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 55.00 605.00 605.00 600.00 93.50 2,609.22	420.00 140.00 140.00 0.00 58.67 58.67 0.00  Amount 75.00 75.00 75.00	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 77,785.10 ttal Cost 7,425.00 5,362.50 5,362.50
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total	***	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	Installation Uni  \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 55.00 605.00 605.00 600.00 93.50 2,609.22	420.00 140.00 140.00 0.00 58.67 58.67 0.00  Amount 75.00 75.00 0.00 75.00	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 177,785.10 ttal Cost 7,425.00 5,362.50 
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total  Right of Way (Sq Ft)	***	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	Installation Un  \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  iit Cost 55.00 82.50 605.00 27.50 55.00 605.00 605.00 605.00 605.00 82.50 605.00	420.00 140.00 140.00 0.00 58.67 58.67 0.00  Amount 75.00 75.00 75.00  Sq Ft	\$	2,852.64 262.08 500.64 3,577.73 335.81 9,801.87 64,615.83 13,169.27 177,785.10 ttal Cost

General In	formation	Мар
Project ID		
Street Name	Patricia Lane	
Site Visit Date	5/22/13	E Carmelat De
Road Classification	Minor road	Grand Calery
Project	Notes	Ginger Cale Tri
Urban typical section with curb and		
,		Barre D. Companyon
Field N	Natos	Petrica Ln Stanley Rd Remway Dr
Design (Existing	****	vidojeDr &
Existing Road Laneage	2 - 10'	
Existing Shid Width (paved and g		Gingercake Or
Existing Side Slopes	Flat	- 1
Existing Guardrail	None	- 15 ~~~
Depth fm Pavement to Top of Cu		- \ \Q
Pipe Type and Size	54" CMP	Ginge Strate
Pipe Condition (1-5) (1 is new)	54" CMP	Marin CW Land Calve
Condition Notes: Joint failure, signs	•	Maniya DrW Maniya DrE
		\@\\
needed, eroded drop, holes from so of pipe		X X L
Pavement Type/Condition	Asphalt/Good	
Fusionan		Stage Construction Options
Environment		Close Location to Traffic
Wetlands	None	Maintain One Lane - No Temp Pavement X
Ditches	None	Maintain One Lane - Temp Pavement
		Stage Construction Notes:
Utilities (Visua		
Electric	Aerial	
Cable	Aerial	
Phone	Buried	
Gas		
Water		
Sewer		
Other		
	Propos	sed Design
- Landanitan		· ·
Roadway Section	8' x 4' box, concrete, 150' length	
Culvert Size & Material		
Utility Relocations	Pole next to pipe, phone, cable,	electric
Guardrail Replacement		
Miscellaneous Features		
	Planning	Cost Estimate
Туре	Note	
Design	Includes 10% Construction (	
Right of Way Cost	Assuming project extends	
Utility Relocation Cost	Buried utilit	
Construction Cost	Assuming 1/10 acre cle	
Environmental Permits	Assuming minimal environm	
Elivii Olimentai i ennits	Assuming minimal crivitorii	iental permitting required   \$\psi_10,000

Total Planning Estimate

\$295,527







Photo 1:



Photo 2:

5/21/2013

Taken By:

David King

Page:





Photo 3:



Photo 4:

5/21/2013

Taken By:

David King

Page:

Roadway Construction Pavement (SF) Curb and Gutter (LF) Drain Inlet (EA) 4" Sidewalk (SY) Guardrail (LF) End Anchorage (EA)	Removal Uni \$ \$ \$	0.73 28.56 13.56 4.88	Installation U \$ \$ \$ \$ \$	nit Cost 4.87 30.60 3,000.00 36.90 49.09 1,380.00	Amount 200.00 0.00 0.00 0.00 0.00 0.00	\$ \$ \$ \$ \$ \$	al Cost 1,121.07 - - - -
Subtotal						\$	1,121.07
Grading Complete (5% of Rwy Items & Drng Total \$)  Roadway Total						\$	8,629.47 9,750.54
·							,
Drainage Trench Excavation (CY)	Removal Uni	t Cost	Installation U \$	nit Cost 10.38	Amount 444.44	Tot \$	al Cost 4,613.33
54" CMP (LF)	\$	24.60			150.00	\$	11,070.00
54" RCP Class A Conc (CY)			\$ \$	233.28 892.19	0.00 141.03		- 25,825.27
Steel (lb)			\$	1.42	16,505.00		
Pipe Bedding (CY) Trench Backfill (CY)			\$ \$	48.60 2.99	56.30 477.03		2,736.18 1,425.38
Trench Compaction (CY)			\$	6.36	381.63	\$	2,427.15
Drainage Total						\$ 17	71,468.39
Signing and Marking			Installation U		Amount		al Cost
Permanent Striping (LF)			\$	0.71	0.00	\$	-
Signing and Marking Total						\$	-
Staging			Installation U	nit Cost	Amount	Tot	al Cost
Clearing and Grubbing (Acre) Temporary Pavement			\$	10,260.00	0.10	\$ \$	1,026.00
Temporary Drainage (Stream Diversion)			\$	4,428.00	1.00		4,428.00
Staging Total						\$	5,454.00
Erosion Control Fine Grading and Seeding (SY)			Installation U \$	nit Cost 4.39	Amount 144.44		al Cost 634.40
Temporary Grassing (AC)			\$	855.60	0.00		-
Type C Silt Fence (LF)			\$ \$	4.24	600.00		2,541.60
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY)			\$ \$	6.79 1.87	600.00 200.00		4,075.20 374.40
Landscape Mulch (SY)			\$	3.58	200.00		715.20
Perm Grassing (AC) Rip Rap Type 3 12" (SY)			\$ \$	1,402.20 60.98	0.00 26.67		- 1,626.24
Plastic Filter Fabric (SY)			\$	5.72	26.67	\$	152.64
4" Ditch Paving (SY)			\$	54.65	0.00	\$	-
Erosion Control Total						\$	10,119.68
Construction Cost Total						\$ 19	96,792.61
Traffic Control (8% of Construction Total \$)						\$	15,743.41
Construction Cost Grand Total						\$2	12,536.02
Utility Relocation	Removal Uni	t Cost	Installation U	nit Cost	Amount	Tot	al Cost
Electric Aerial	\$	11.00	\$	55.00		\$	-
Buried	\$	16.50	\$	82.50	25.00	\$	2,475.00
Wooden Pole Phone	\$	82.50	\$	605.00	1.00	\$	687.50
Aerial	\$	11.00	\$	27.50		\$	-
Buried	\$	16.50	\$	55.00	25.00		1,787.50
Wooden Pole Cable	\$	82.50	\$	605.00		\$	-
Aerial	\$	11.00	\$	27.50		\$	-
Buried Wooden Pole	\$ \$	16.50 82.50	\$ \$	55.00 605.00	25.00	\$ \$	1,787.50
Gas		02.00		003.00			-
4" main Water	\$	16.50	\$	66.00		\$	-
8" main	\$	16.50	\$	93.50	0.00		-
Relocate Fire Hydrant (EA) Sewer			\$	2,609.22	0.00	\$	-
12" main	\$	16.50	\$	82.50	0.00		-
Utility Relocation Total						\$	6,737.50
Right of Way (Sq Ft)			Cost/ Sq Ft		Sq Ft		al Cost
Permanent Easement			\$	4.00	10,000.00	\$ 4	40,000.00
ROW Total			·			\$ 4	40,000.00

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:

Furding non-contact Fractions	
Pavement Type/Condition	gravel dirt/ poor

LITVII OI II II EI II	iai i catures
Wetlands	Noted
Ditches	None
Utilities (Visua	al Inspection)
Electric	Aerial
Cable	Aerial
Phone	Aerial
Gas	
Water	Buried
Sewer	
Other	



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

Stage Construction Notes:

	Froposeu Desig
Roadway Section	

7'x4' box, concrete, 85' length Culvert Size & Material

Two utility poles. Aerial electric, cable, phone. Buried water main **Utility Relocations** 

Guardrail Replacement

Miscellaneous Features

Planning Cost Estimate					
Туре	Notes	Total			
Design	Includes 10% Construction Cost and surveying needs	\$17,381			
Right of Way Cost	Assuming project extends 4,000 sf beyond ROW	\$16,000			
Utility Relocation Cost	Aerial utilities, poles, and buried water main	\$26,675			
Construction Cost	Assuming 1/10 acre clearing and grubbing	\$123,805			
Environmental Permits	Assuming minimal environmental permitting required	\$10,000			

Total Planning Estimate	\$193,861
-------------------------	-----------







Photo 1:



Photo 2:

5/21/2013

Taken By:

David King

Page:

•	,						
Roadway Construction	Removal		Installation U	Jnit Cost	Amount		tal Cost
Pavement (SF)	\$	0.73	\$	4.87	0.00		-
Gravel Road (SY)			\$	15.42	83.11	\$	1,281.57
Curb and Gutter (LF)	\$	28.56	\$	30.60	0.00	\$	-
Drain Inlet (EA)			\$	3,000.00	0.00	\$	-
4" Sidewalk (SY)	\$	13.56	\$	36.90	0.00	\$	-
Guardrail (LF)	\$	4.88	\$	49.09	0.00	\$	-
End Anchorage (EA)			\$	1,380.00	0.00		-
Subtotal			<u>,                                      </u>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		\$	1,281.5
Subtotal						Ψ	1,201.0
Grading Complete (5% of Rwy Items & Drng Total \$)						\$	4,773.36
Roadway Total						\$	6,054.9
Orainage	Removal	Unit Cost	Installation U	Jnit Cost	Amount	To	otal Cost
Trench Excavation (CY)			\$	10.38	279.08	\$	2,896.8
60" CMP (LF)	\$	24.60			85.00	\$	6,273.0
60" RCP `	•		\$	259.20	0.00		
Class A Conc (CY)			\$	892.19			69,171.3
Steel (lb)			\$	1.42	8,370.00		
Pipe Bedding (CY)			\$	48.60	29.00		1,409.4
French Backfill (CY)			\$	2.99	319.85		955.7
French Compaction (CY)			\$	6.36	255.88	\$	1,627.4
Orainage Total						\$	94,185.6
							,
Signing and Marking			Installation U		Amount		otal Cost
Permanent Striping (LF)			\$	0.71	0.00	\$	-
Signing and Marking Total						\$	-
Staging			Installation U	Jnit Cost	Amount	To	tal Cost
Clearing and Grubbing (Acre)			\$	10,260.00	0.20	\$	2,052.0
Temporary Pavement			•	-,		\$	-
Femporary Drainage (Stream Diversion)			\$	4,428.00	1.00		4,428.0
Comporary Dramage (Cardam Diversion)			•	., .20.00			.,
Staging Total						\$	6,480.0
Erosion Control			Installation U	Init Coat	Amount	т.	otal Cost
			\$	4.39	119.00		522.6
Fine Grading and Seeding (SY)							522.0
Temporary Grassing (AC)			\$	855.60	0.00		<del>-</del> .
Гуре C Silt Fence (LF)			\$	4.24	340.00	\$	1,440.2
Check Dam Type C Silt Fence (LF)			\$	6.79	340.00	\$	2,309.2
Erosion Control Mats (SY)			\$	1.87	113.33	\$	212.1
_andscape Mulch (SY)			\$	3.58	113.33	\$	405.2
Perm Grassing (AC)			\$	1,402.20	0.00	\$	-
Rip Rap Type 3 12" (SY)			\$	60.98	45.33		2,764.6
Plastic Filter Fabric (SY)			\$	5.72	45.33		259.4
4" Ditch Paving (SY)			\$	54.65	0.00	\$	-
Erosion Control Total						\$	7,913.7
Construction Cost Total						\$1	114,634.3
Fraffic Control (8% of Construction Total \$)						\$	9,170.7
Construction Cost Grand Total						\$1	123,805.0
Jtility Relocation	Removal	Unit Cost	Installation U	Init Cost	Amount	To	otal Cost
Electric	Romoval	J. III 0001	oranation C	J. M. 0001	7 ii i odi ii		0031
erial	\$	44.00		55.00	400.00	ø	6 600 0
	.n		Φ.		100.00		6,600.0
Buried		11.00	\$				
	\$	16.50	\$	82.50	0.00		1,375.0
Vooden Pole							
Nooden Pole Phone	\$ \$	16.50 82.50	\$ \$	82.50 605.00	0.00 2.00	\$	
Wooden Pole Phone Aerial	\$ \$ \$	16.50 82.50 11.00	\$ \$	82.50 605.00 27.50	0.00 2.00 100.00	\$	
Wooden Pole Phone Aerial Buried	\$ \$ \$	16.50 82.50 11.00 16.50	\$ \$ \$	82.50 605.00 27.50 55.00	0.00 2.00	\$ \$ \$	
Wooden Pole Phone Aerial Buried	\$ \$ \$	16.50 82.50 11.00	\$ \$	82.50 605.00 27.50	0.00 2.00 100.00	\$	
Vooden Pole Phone Aerial Buried Vooden Pole	\$ \$ \$	16.50 82.50 11.00 16.50	\$ \$ \$	82.50 605.00 27.50 55.00	0.00 2.00 100.00	\$ \$ \$	
Vooden Pole Phone Aerial Buried Vooden Pole Cable	\$ \$ \$ \$ \$ \$	16.50 82.50 11.00 16.50 82.50	\$ \$ \$ \$ \$ \$	82.50 605.00 27.50 55.00 605.00	0.00 2.00 100.00 0.00	\$ \$ \$	3,850.0 - -
Vooden Pole Phone kerial Buried Vooden Pole Jable kerial	\$ \$ \$ \$ \$ \$ \$	16.50 82.50 11.00 16.50 82.50	\$ \$ \$ \$ \$	82.50 605.00 27.50 55.00 605.00	0.00 2.00 100.00 0.00	\$ \$ \$ \$	3,850.0 - -
Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried	\$ \$ \$ \$ \$	16.50 82.50 11.00 16.50 82.50 11.00 16.50	\$ \$ \$ \$ \$ \$	82.50 605.00 27.50 55.00 605.00 27.50 55.00	0.00 2.00 100.00 0.00	\$ \$\$\$ \$\$\$	3,850.0 - -
Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole	\$ \$ \$ \$ \$ \$ \$	16.50 82.50 11.00 16.50 82.50	\$ \$ \$ \$ \$	82.50 605.00 27.50 55.00 605.00	0.00 2.00 100.00 0.00	\$ \$ \$ \$	3,850.0 - -
Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gasuried Wooden Pole Gasa 4* main	\$ \$ \$ \$ \$	16.50 82.50 11.00 16.50 82.50 11.00 16.50	\$ \$ \$ \$ \$ \$	82.50 605.00 27.50 55.00 605.00 27.50 55.00	0.00 2.00 100.00 0.00	\$ \$\$\$ \$\$\$	3,850.0 - -
Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas	\$ \$ \$ \$ \$	16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	\$ \$ \$ \$ \$ \$ \$	82.50 605.00 27.50 55.00 605.00 27.50 55.00 605.00	0.00 2.00 100.00 0.00	\$ \$ \$ \$ \$	3,850.0 - -
Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas ** main Water	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	\$ \$ \$ \$ \$ \$ \$ \$ \$	82.50 605.00 27.50 55.00 605.00 27.50 55.00 605.00 66.00	0.00 2.00 100.00 0.00 100.00 0.00	\$ \$\$\$ \$\$\$\$	3,850.0 - - 3,850.0 - -
Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cass "" main Water "" main	\$ \$ \$ \$ \$	16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	\$\$ \$\$\$ \$\$\$ \$	82.50 605.00 27.50 55.00 605.00 27.50 55.00 605.00 66.00	0.00 2.00 100.00 0.00 100.00 0.00	\$ \$\$\$\$ \$\$\$\$ \$	3,850.0 - - 3,850.0 - -
Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas I" main Water " main Relocate Fire Hydrant (EA)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	\$ \$ \$ \$ \$ \$ \$ \$ \$	82.50 605.00 27.50 55.00 605.00 27.50 55.00 605.00 66.00	0.00 2.00 100.00 0.00 100.00 0.00	\$ \$\$\$ \$\$\$\$	3,850.0 - - 3,850.0 - -
Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cass "" main Water "" main	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	\$\$ \$\$\$ \$\$\$ \$	82.50 605.00 27.50 55.00 605.00 27.50 55.00 605.00 66.00	0.00 2.00 100.00 0.00 100.00 0.00	\$ \$\$\$\$ \$\$\$\$ \$	3,850.0 - - 3,850.0 - -
Vooden Pole Phone Rerial Buried Vooden Pole Cable Rerial Buried Vooden Pole Saried Vooden Pole Sas " main Vater " main Relocate Fire Hydrant (EA)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	\$\$ \$\$\$ \$\$\$ \$\$\$	82.50 605.00 27.50 55.00 605.00 27.50 55.00 605.00 66.00 93.50 2,609.22	0.00 2.00 100.00 0.00 100.00 0.00	\$ \$\$\$ \$\$\$ \$	3,850.0 - - 3,850.0 - - - - 11,000.0
Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas I' main Water I' main Relocate Fire Hydrant (EA) Sewer [2" main Utility Relocation Total	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	82.50 605.00 27.50 55.00 605.00 27.50 55.00 605.00 66.00 93.50 2,609.22	0.00 2.00 100.00 0.00 100.00 0.00 0.00	\$ \$\$\$ \$\$\$ \$\$\$	3,850.0 - 3,850.0 - - - 11,000.0 - - 26,675.0
Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas I" main Water I" main Relocate Fire Hydrant (EA)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	\$\$ \$\$\$ \$\$\$ \$\$\$	82.50 605.00 27.50 55.00 605.00 27.50 55.00 605.00 66.00 93.50 2,609.22	0.00 2.00 100.00 0.00 100.00 0.00	\$ \$\$\$\$ \$ \$\$\$	3,850.0 - - 3,850.0 - - - - 11,000.0

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

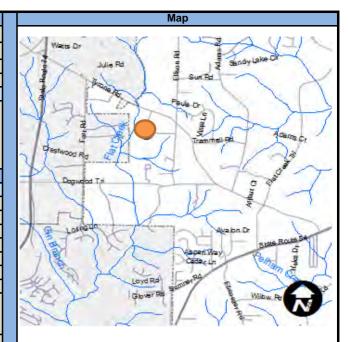
## **Project Notes**

Rural typical section. Point is close to FEMA Zone A fllood boundary. Including cost of Zone A flood study based on limited location information.

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	N	oted			
Utilities (Visua	al Inspection)				
Electric	A	erial			
Cable	Aerial				
Phone	A	erial			
Gas	None				
Water	Вι	ıried			
Sewer					
Other					



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 accommodated for during construction

Roadway Section	Typical rural. Driveway removal/replacement costed as 20' x 9' concrete sidewalk
Culvert Size & Material	4' x 2' box, concrete, 50'
Utility Relocations	Utility poles, aerial lectric, cable,phone, buried water
Guardrail Replacement	
	Series of three 18" pipes. Upper two are within reasonable sizes, second one in series could be upsized

**Proposed Design** 

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				
Туре	Notes	Total		
Design	Includes 10% Construction Cost and surveying needs	\$17,008		
Right of Way Cost	Assuming project extends 2,000 sf beyond ROW	\$8,000		
Utility Relocation Cost	Aerial utilities, poles, and buried water main	\$14,025		
Construction Cost	Assuming 1/10 acre clearing and grubbing	\$45,081		
Environmental Permits	Permitting, Zone A flood study	\$15,000		

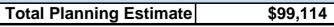








Photo 1:



Photo 2:

5/21/2013

Taken By:

David King

Page:





Photo 3:



Photo 4:

Photo Date:

5/21/2013

Taken By:

David King

Page:

Right of Way (Sq Ft)			Cost/ Sq Ft		Sq Ft	T	al Cost
Utility Relocation Total			·		0.00		1,025.00
Relocate Fire Hydrant (EA) Sewer 12" main	\$	16.50	\$ 2,6	82.50	0.00 0.00	\$ \$	-
Water 8" main Releasts Fire Hydropt (FA)	\$	16.50	\$	93.50	50.00		5,500.00
Gas 4" main	\$	16.50	\$	66.00	0.00	\$	-
Wooden Pole	\$ \$	82.50		605.00	0.00		-
Aerial Buried	\$ \$	11.00 16.50	\$ \$	27.50 55.00	50.00 0.00		,925.00 -
Wooden Pole Cable	\$	82.50	\$	605.00	0.00	Ъ	-
Buried	\$	16.50	\$	55.00	0.00	\$	-
Prione Aerial	\$	11.00	\$	27.50			1,925.00
Wooden Pole Phone	\$	82.50	\$	605.00	2.00	\$ 1	,375.00
Buried	\$	16.50	\$	82.50	0.00	\$	-
Electric Aerial	\$	11.00	\$	55.00	50.00	\$ 3	3,300.00
Utility Relocation	Removal Uni	t Cost	Installation Unit	Cost	Amount	Tota	al Cost
Construction Cost Grand Total						\$45	5,081.07
Traffic Control (8% of Construction Total \$)						\$ 3	3,339.34
Construction Cost Total						\$41	1,741.73
Erosion Control Total						\$ 3	3,721.04
Plastic Filter Fabric (SY) 4" Ditch Paving (SY)			\$ \$	5.72 54.65	16.00 0.00	\$ \$	91.58
Rip Rap Type 3 12" (SY)			\$	60.98	16.00		975.74
Perm Grassing (AC)			\$ 1,4	102.20	0.00	\$	-
Erosion Control Mats (SY) Landscape Mulch (SY)			\$ \$	1.87 3.58	66.67 66.67		124.80 238.40
Check Dam Type C Silt Fence (LF)			\$	6.79	200.00	\$ 1	,358.40
Temporary Grassing (AC) Type C Silt Fence (LF)			\$	355.60 4.24	0.00 200.00		847.20
Fine Grading and Seeding (SY)			\$	4.39	19.33	\$	84.91
Erosion Control			Installation Unit	Cost	Amount	Tota	al Cost
Staging Total						\$ 5	5,454.00
Temporary Drainage (Stream Diversion)			\$ 4,4	128.00	1.00		1,428.00
Clearing and Grubbing (Acre) Temporary Pavement			\$ 10,2	260.00	0.10	\$ 1 \$	1,026.00 -
Staging			Installation Unit		Amount		al Cost
Signing and Marking Total						\$	-
Permanent Striping (LF)			\$	0.71	0.00	\$	-
Signing and Marking			Installation Unit	Cost	Amount		al Cost
Drainage Total							9,300.43
Trench Backfill (CY) Trench Compaction (CY)			\$ \$	2.99 6.36	161.90 129.52		483.76 823.75
Steel (lb) Pipe Bedding (CY)			\$ \$	1.42 48.60	2,189.00 11.60	\$	563.76
Class A Conc (CY)			•	392.19			1,912.14
18" RCP	Ψ	5.74	\$	36.00	0.00		-
Trench Excavation (CY) 18" CMP (LF)	\$	5.74	\$	10.38	150.00 50.00		557.00, 860.40
Drainage	Removal Uni	t Cost	Installation Unit	Cost	Amount	Tota	al Cost
Roadway Total						\$ 3	3,266.27
Grading Complete (5% of Rwy Items & Drng Total \$)						\$ 1	,550.79
End Anchorage (EA) Subtotal			\$ 1,3	380.00	0.00		- 1,715.47
Guardrail (LF)	\$	4.88	\$	49.09	0.00	\$	-
Orain Inlet (EA) 4" Sidewalk (SY)	\$	13.56	\$ 3,0 \$	000.00 36.90	0.00 20.00		- 1,009.20
Curb and Gutter (LF)	\$	28.56	\$	30.60	0.00		-
Pavement (SF)	\$	0.73	\$	4.87	126.00	\$	706.27
Roadway Construction	Removal Uni	t Cost	Installation Unit	Cost	Amount	Tota	al Cost

General	Information	Мар	
Project ID			
Street Name	Silver Leaf Drive		-
Site Visit Date	5/21/13		
Road Classification	Internal Local	- Hood.	Aub
	ect Notes	3	
Jrban typical w/ valley gutter. Po	oint is close to FEMA Zone A flood	Red	
	A flood study given limited location	** Ord Ca	
information	, , , , , , , , , , , , , , , , , , ,	Forest Dr &	
		n SwerterDr 💆	Landing
			ুক '
Field	d Notes	·	a de
Design (Existi	ing Site Features)	Brandy Wine Blvd	Men Managan Dx
Existing Road Laneage	2-12'	Called D. Control	Manufacture Manufa
Existing ShId Width (paved and		Adula Dr. Rd	
Existing Side Slopes	4:1	0	Corne
Existing Guardrail	None		
Depth fm Pavement to Top of (		Bendywine Blvd &	- 4
Pipe Type and Size	1-54" CMP	The state of the s	1
Pipe Condition (1-5) (1 is new)	4	4	
Condition Notes:			Route 54
Donalion Notes.			A.F
		/	
			W
Pavement Type/Condition	Good	/	Y S
Pavement Type/Condition	Good	Stage Construction Options	146
		Stage Construction Options Close Location to Traffic	
Environme	ental Features	Close Location to Traffic	X
Environme Wetlands	ental Features X (downstream)	Close Location to Traffic  Maintain One Lane - No Temp Pavement	
Environme Wetlands	ental Features	Close Location to Traffic  Maintain One Lane - No Temp Pavement  Maintain One Lane - Temp Pavement	
Environme Wetlands	ental Features X (downstream)	Close Location to Traffic Maintain One Lane - No Temp Pavement Maintain One Lane - Temp Pavement Stage Construction Notes:	
Environme Wetlands	ental Features X (downstream)	Close Location to Traffic  Maintain One Lane - No Temp Pavement  Maintain One Lane - Temp Pavement	
Environme Wetlands Ditches	ental Features  X (downstream)  None	Close Location to Traffic Maintain One Lane - No Temp Pavement Maintain One Lane - Temp Pavement Stage Construction Notes:	
Environme Wetlands Ditches Utilities (Vis	ental Features X (downstream)	Close Location to Traffic Maintain One Lane - No Temp Pavement Maintain One Lane - Temp Pavement Stage Construction Notes:	
Environme Wetlands Ditches Utilities (Vis	ental Features  X (downstream)  None  sual Inspection)	Close Location to Traffic Maintain One Lane - No Temp Pavement Maintain One Lane - Temp Pavement Stage Construction Notes:	
Environme Wetlands Ditches  Utilities (Vis	ental Features  X (downstream)  None  sual Inspection)  Aerial	Close Location to Traffic Maintain One Lane - No Temp Pavement Maintain One Lane - Temp Pavement Stage Construction Notes:	
Environme Wetlands Ditches  Utilities (Vis Electric Cable Phone	ental Features  X (downstream)  None  sual Inspection)  Aerial  Buried	Close Location to Traffic Maintain One Lane - No Temp Pavement Maintain One Lane - Temp Pavement Stage Construction Notes:	
Wetlands Ditches  Utilities (Vis Electric Cable Phone Gas	Ental Features  X (downstream)  None  Sual Inspection)  Aerial  Buried  Buried  Buried  Buried	Close Location to Traffic Maintain One Lane - No Temp Pavement Maintain One Lane - Temp Pavement Stage Construction Notes:	
Environme Wetlands Ditches  Utilities (Vis Electric Cable Phone Gas Water	Aerial Buried Buried Buried	Close Location to Traffic Maintain One Lane - No Temp Pavement Maintain One Lane - Temp Pavement Stage Construction Notes:	
Environme Wetlands Ditches  Utilities (Vis Electric Cable Phone Gas	Ental Features  X (downstream)  None  Sual Inspection)  Aerial  Buried  Buried  Buried  Buried	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	dbl 4' x 3' box, concrete, 140'			
Utility Relocations	Phone, cable, gas, water			
Guardrail Replacement				
Miscellaneous Features				

Planning Cost Estimate				
Type	Notes	Total		
Design	Includes 10% Construction Cost and surveying needs	\$29,259		
Right of Way Cost	Assuming project extends 4,800 sf beyond ROW	\$19,200		
Utility Relocation Cost	Buried utilities	\$16,775		
Construction Cost	Assuming 1/10 acre clearing and grubbing	\$167,593		
Environmental Permits	Permitting, Zone A flood study	\$15,000		
•	_			

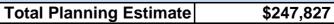








Photo 1:



Photo 2:

5/21/2013

Taken By:

David King

Page:

Roadway Construction	Removal Unit		Installation Un		Amount		otal Cost
Pavement (SF)	\$	0.73	\$	4.87	240.00	\$	1,345.28
Curb and Gutter (LF)	\$	28.56	\$	30.60	20.00	\$	1,183.20
Drain Inlet (EA)			\$	3,000.00	2.00	\$	6,000.00
4" Sidewalk (SY)	\$	13.56	\$	36.90	0.00		-
, ,	\$						
Guardrail (LF)	Φ	4.88	\$	49.09	0.00		-
End Anchorage (EA)			\$	1,380.00	0.00		-
Subtotal						\$	8,528.48
Grading Complete (5% of Rwy Items & Drng Total \$)						\$	6,675.57
3 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 - 4 -						•	-,
Roadway Total						•	15,204.05
Roduway Total						Φ	15,204.05
		_				_	
Drainage	Removal Unit	Cost	Installation Un		Amount	To	otal Cost
Trench Excavation (CY)			\$	10.38	544.44	\$	5,651.33
54" CMP (LF)	\$	24.60			140.00	\$	10,332.00
54" RCP			\$	217.35	0.00	\$	-
Class A Conc (CY)			\$	892.19	92.81	\$	82,803.97
Steel (lb)			\$	1.42	13,265.00		
					,		,
Pipe Bedding (CY)			\$	48.60	52.60		2,556.36
Trench Backfill (CY)			\$	2.99	601.29		1,796.65
Trench Compaction (CY)			\$	6.36	481.03	\$	3,059.36
Drainage Total						\$ 1	124,982.91
-							
Signing and Marking			Installation Un	it Cost	Amount	To	otal Cost
0 0							0001
Permanent Striping (LF)			\$	0.71	0.00	\$	-
Signing and Marking Total						\$	-
Staging			Installation Un	it Cost	Amount	To	otal Cost
Clearing and Grubbing (Acre)				0,260.00	0.10		1,026.00
Temporary Pavement			•	5,200.00	00	\$	.,020.00
			c .	4 400 00	1.00	\$	4 420 00
Temporary Drainage (Stream Diversion)			\$ 4	4,428.00	1.00	Ф	4,428.00
Staging Total						\$	5,454.00
Erosion Control			Installation Un	it Cost	Amount	To	otal Cost
Fine Grading and Seeding (SY)			\$	4.39	128.89		566.08
g , ,							
Temporary Grassing (AC)			\$	855.60	0.00	Ф	-
Type C Silt Fence (LF)			\$	4.24	560.00		2,372.16
Type C Silt Fence (LF) Check Dam Type C Silt Fence (LF)			\$	4.24 6.79	560.00 560.00		2,372.16 3,803.52
			\$			\$	
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY)			\$ \$	6.79 1.87	560.00 186.67	\$ \$	3,803.52 349.44
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY)			\$ \$ \$	6.79 1.87 3.58	560.00 186.67 186.67	\$ \$ \$	3,803.52
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC)			\$ \$ \$	6.79 1.87 3.58 1,402.20	560.00 186.67 186.67 0.00	\$ \$ \$	3,803.52 349.44 667.52
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY)			\$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98	560.00 186.67 186.67 0.00 26.67	\$ \$ \$ \$	3,803.52 349.44 667.52 - 1,626.24
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY)			\$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	560.00 186.67 186.67 0.00 26.67 26.67	\$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY)			\$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98	560.00 186.67 186.67 0.00 26.67	\$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 - 1,626.24
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY)			\$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	560.00 186.67 186.67 0.00 26.67 26.67	\$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 - 1,626.24
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY)			\$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	560.00 186.67 186.67 0.00 26.67 26.67	\$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 - 1,626.24
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)			\$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	560.00 186.67 186.67 0.00 26.67 26.67	\$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 - 1,626.24 152.64
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total			\$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	560.00 186.67 186.67 0.00 26.67 26.67	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 - 1,626.24 152.64 - 9,537.60
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)			\$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	560.00 186.67 186.67 0.00 26.67 26.67	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 - 1,626.24 152.64
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total			\$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	560.00 186.67 186.67 0.00 26.67 26.67	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 - 1,626.24 152.64 - 9,537.60
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total			\$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	560.00 186.67 186.67 0.00 26.67 26.67	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 - 1,626.24 152.64 - 9,537.60
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)			\$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	560.00 186.67 186.67 0.00 26.67 26.67	\$	3,803.52 349.44 667.52 1,626.24 152.64 - 9,537.60 155,178.56
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY) Erosion Control Total Construction Cost Total			\$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72	560.00 186.67 186.67 0.00 26.67 26.67	\$	3,803.52 349.44 667.52 - 1,626.24 152.64 - 9,537.60
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total			\$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65	560.00 186.67 186.67 0.00 26.67 26.67 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)	Removal Unit	Cost	\$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65	560.00 186.67 186.67 0.00 26.67 26.67	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 - 9,537.60 155,178.56
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total	Removal Unit	Cost	\$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65	560.00 186.67 186.67 0.00 26.67 26.67 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation		Cost	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ Installation Un	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65	560.00 186.67 186.67 0.00 26.67 26.67 0.00	\$ \$ \$ \$ \$ \$ \$ \$ To	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial	\$	11.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65	560.00 186.67 186.67 0.00 26.67 26.67 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried	\$ \$	11.00 16.50	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65	560.00 186.67 186.67 0.00 26.67 26.67 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole	\$	11.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65	560.00 186.67 186.67 0.00 26.67 26.67 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone	\$ \$ \$	11.00 16.50 82.50	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65	560.00 186.67 186.67 0.00 26.67 26.67 0.00	\$\$\$\$\$\$\$\$ \$\$\$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial	\$ \$ \$	11.00 16.50 82.50 11.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ Installation Un \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65 sit Cost 55.00 82.50 605.00 27.50	560.00 186.67 186.67 0.00 26.67 26.67 0.00 Amount	\$\$\$\$\$\$\$\$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried  Wooden Pole Phone Aerial Buried	\$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50	s s s s s s s s s s s s s s s s s s s	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00	560.00 186.67 186.67 0.00 26.67 26.67 0.00	\$\$\$\$\$\$\$\$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial	\$ \$ \$	11.00 16.50 82.50 11.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ Installation Un \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65 sit Cost 55.00 82.50 605.00 27.50	560.00 186.67 186.67 0.00 26.67 26.67 0.00 Amount	\$\$\$\$\$\$\$\$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried  Wooden Pole Phone Aerial Buried	\$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50	s s s s s s s s s s s s s s s s s s s	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00	560.00 186.67 186.67 0.00 26.67 26.67 0.00 Amount	\$\$\$\$\$\$\$\$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable	\$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50	S S S S S S S S S S S S S S S S S S S	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65	560.00 186.67 186.67 0.00 26.67 26.67 0.00 Amount	\$\$\$\$\$\$\$\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial  Wooden Pole Cable Aerial	\$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00	S S S S S S S S S S S S S S S S S S S	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  siit Cost 55.00 82.50 605.00 27.50 55.00 27.50	560.00 186.67 186.67 0.00 26.67 26.67 0.00 Amount 0.00	\$\$\$\$\$\$\$\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried	***	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50	S S S S S S S S S S S S S S S S S S S	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 55.00	560.00 186.67 186.67 0.00 26.67 26.67 0.00 Amount	\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole	\$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00	S S S S S S S S S S S S S S S S S S S	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  siit Cost 55.00 82.50 605.00 27.50 55.00 27.50	560.00 186.67 186.67 0.00 26.67 26.67 0.00 Amount 0.00	\$\$\$\$\$\$\$\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	Installation Un	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 55.00 605.00	560.00 186.67 186.67 0.00 26.67 26.67 0.00 Amount 0.00 50.00	\$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole	***	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50	S S S S S S S S S S S S S S S S S S S	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 55.00	560.00 186.67 186.67 0.00 26.67 26.67 0.00 Amount 0.00	\$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	Installation Un	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 55.00 605.00	560.00 186.67 186.67 0.00 26.67 26.67 0.00 Amount 0.00 50.00	\$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cass 4" main	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	S S S S S S S S S S S S S S S S S S S	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 605.00 66.00	560.00 186.67 186.67 0.00 26.67 26.67 0.00 Amount 0.00 50.00	\$\$\$\$\$\$\$\$\$\$\$\$\$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost 3,575.00 - 3,575.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50	S S S S S S S S S S S S S S S S S S S	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 605.00 93.50	560.00 186.67 186.67 0.00 26.67 26.67 0.00 Amount 0.00 50.00	\$\$\$\$\$\$\$\$\$\$\$\$\$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA)	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	Installation Unss	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 605.00 66.00	560.00 186.67 186.67 0.00 26.67 26.67 0.00 Amount  0.00  50.00  50.00	\$\$\$\$\$\$\$\$\$\$\$\$\$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost 3,575.00 - 3,575.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Rooden Pole Cable Aerial Buried	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	Installation Uni  \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 605.00 605.00 605.00 93.50 2,609.22	560.00 186.67 186.67 0.00 26.67 0.00 26.67 0.00 Amount  0.00  50.00  50.00  0.00	\$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost 3,575.00 - 3,575.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	S S S S S S S S S S S S S S S S S S S	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 605.00 93.50	560.00 186.67 186.67 0.00 26.67 26.67 0.00 Amount  0.00  50.00  50.00	\$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 ottal Cost 3,575.00 4,125.00 5,500.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Rooden Pole Cable Aerial Buried	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	Installation Uni  \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 605.00 605.00 605.00 93.50 2,609.22	560.00 186.67 186.67 0.00 26.67 0.00 26.67 0.00 Amount  0.00  50.00  50.00  0.00	\$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost 3,575.00 - 3,575.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	Installation Un  \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 605.00 605.00 605.00 93.50 2,609.22	560.00 186.67 186.67 0.00 26.67 26.67 0.00 50.00 50.00 50.00 50.00 0.00 0.00	\$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost - - 3,575.00 4,125.00 5,500.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	Installation Uni  \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 605.00 605.00 605.00 93.50 2,609.22	560.00 186.67 186.67 0.00 26.67 0.00 26.67 0.00 Amount  0.00  50.00  50.00  0.00	\$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 ottal Cost 3,575.00 4,125.00 5,500.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	Installation Un  S  S  S  S  Cost/ Sq Ft	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00 605.00 605.00 605.00 605.00 27.50 55.00 605.00 82.50	560.00 186.67 186.67 0.00 26.67 26.67 0.00  Amount  50.00  50.00  50.00  50.00  Sq Ft	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost 3,575.00 4,125.00 5,500.00 16,775.00
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY) Landscape Mulch (SY) Perm Grassing (AC) Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY) 4" Ditch Paving (SY)  Erosion Control Total  Construction Cost Total  Traffic Control (8% of Construction Total \$)  Construction Cost Grand Total  Utility Relocation Electric Aerial Buried Wooden Pole Phone Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Cas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	11.00 16.50 82.50 11.00 16.50 82.50 11.00 16.50 82.50 16.50	Installation Un  \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	6.79 1.87 3.58 1,402.20 60.98 5.72 54.65  sit Cost 55.00 82.50 605.00 27.50 55.00 605.00 27.50 605.00 605.00 605.00 93.50 2,609.22	560.00 186.67 186.67 0.00 26.67 26.67 0.00 50.00 50.00 50.00 50.00 0.00 0.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	3,803.52 349.44 667.52 1,626.24 152.64 9,537.60 155,178.56 12,414.28 167,592.85 otal Cost - - 3,575.00 - 4,125.00 5,500.00

General In	formation	Мар
Project ID		map
	FO2 Woothridge Drive	
Street Name	503 Westbridge Drive	
Site Visit Date	5/22/13	
Road Classification	Internal Local	
Project Urban typical section with Curb and		13 1 73 100
orban typical section with ourb and	u guitei	NothOr
		Maconico de Monta de Maconico
Field I		T ALY TIE COM
Design (Existing		The state of the s
Existing Road Laneage	2-12'	
Existing Shid Width (paved and o		Hand & Section 1
Existing Side Slopes	Flat	
Existing Guardrail	None	
Depth fm Pavement to Top of Cu Pipe Type and Size (with h	livert (ft): 3 leadwall, 45°) 48" CMP; 45'	Firebouse 2d Property of the Party of the Pa
Pipe Condition (1-5) (1 is new)	48 CMP, 45	
Condition Notes: Debris in channel	•	Late Mill Rd New Holpe Rd of the microst Ed
of pipe; US filled/damaged to 3.5'	i, approx. 1.5 drop in last section	
or pipe, ce illica/aamagea to c.e		
Pavement Type/Condition	Good/Asphalt	
· ·		Stage Construction Options
Environmen	tal Features	Close Location to Traffic
Wetlands	None	Maintain One Lane - No Temp Pavement X
Ditches	None	Maintain One Lane - Temp Pavement
		Stage Construction Notes: Stage construction such that one lane is
		open at all times; street light next to crossing
11020 02		
Utilities (Visua	Buried	
Electric Cable	Buried	
Phone	Buried	
Gas	Bulled	
Water	Buried	
Sewer	2 2.100	
Other		
	Propose	ed Design
Poodway Section		
Roadway Section		
Culvert Size & Material	5' x 3' box, concrete, 45' Length	
January Caracterial		
Utility Relocations	Electric, cable, phone, water	
Guardrail Replacement		
Miscellaneous Features		
		Cost Estimate

Notes

Includes 10% Construction Cost and surveying needs

Assuming project extends 1,200 sf beyond ROW

Buried utilities

Assuming 1/10 acre clearing and grubbing

Assuming minimal environmental permitting required

**Total Planning Estimate** 

Total

\$10,078

\$4,800

\$14,080

\$50,776

\$10,000

\$89,733



Type
Design
Right of Way Cost

**Utility Relocation Cost** 

**Construction Cost** 

**Environmental Permits** 

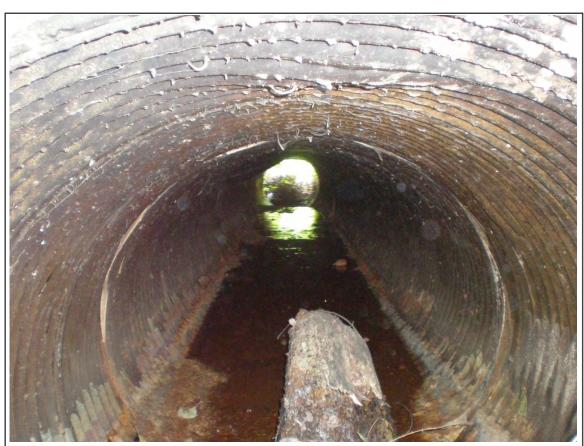




Photo 1:



Photo 2:

5/21/2013

Taken By:

David King

Page:

Aerial Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer 12" main Utility Relocation Total	\$16.50 \$82.50 \$11.00 \$16.50 \$82.50 \$16.50	\$55.00 \$605.00 \$27.50 \$55.00 \$605.00 \$66.00 \$93.50 \$2,609.22	40.00 40.00 40.00 0.00 0.00	\$2,860.00 \$0.00 \$2,860.00 \$0.00 \$0.00 \$4,400.00 \$0.00 \$14,080.00
Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main Relocate Fire Hydrant (EA) Sewer	\$16.50 \$82.50 \$11.00 \$16.50 \$82.50 \$16.50	\$605.00 \$27.50 \$55.00 \$605.00 \$66.00 \$93.50 \$2,609.22	40.00 40.00 0.00	\$0.00 \$0.00 \$2,860.00 \$0.00 \$0.00 \$4,400.00 \$0.00
Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main Water 8" main	\$16.50 \$82.50 \$11.00 \$16.50 \$82.50	\$605.00 \$27.50 \$55.00 \$605.00 \$66.00 \$93.50	40.00	\$0.00 \$0.00 \$2,860.00 \$0.00 \$0.00 \$4,400.00
Buried Wooden Pole Cable Aerial Buried Wooden Pole Gas 4" main	\$16.50 \$82.50 \$11.00 \$16.50 \$82.50	\$605.00 \$27.50 \$55.00 \$605.00		\$0.00 \$0.00 \$2,860.00 \$0.00
Buried Wooden Pole Cable Aerial Buried Wooden Pole	\$16.50 \$82.50 \$11.00 \$16.50	\$605.00 \$27.50 \$55.00		\$0.00 \$0.00 \$2,860.00
Buried Wooden Pole Cable Aerial Buried	\$16.50 \$82.50 \$11.00 \$16.50	\$605.00 \$27.50 \$55.00		\$0.00 \$0.00 \$2,860.00
Buried Wooden Pole Cable	\$16.50 \$82.50	\$605.00	40.00	\$0.00
Buried Wooden Pole	\$16.50		40.00	
		\$55.00		ዷን ጳፍስ ሰሶ
	\$11.00	\$27.50	40.00	\$0.00
Phone				
Buried Wooden Pole	\$16.50 \$82.50	\$82.50 \$605.00	40.00	\$3,960.00 \$0.00
Aerial	\$11.00	\$55.00		\$0.00
Utility Relocation Electric	kemoval Unit Cost	Installation Unit Cost	Amount	Total Cost
	D	Installation II is O	A	
Construction Cost Grand Total				\$50,775.57
Traffic Control (8% of Construction Total \$)				\$3,761.15
Construction Cost Total				\$47,014.42
Erosion Control Total				\$3,628.87
Plastic Filter Fabric (SY) 4" Ditch Paving (SY)		\$5.72 \$54.65	18.67 0.00	\$106.85 \$0.00
Rip Rap Type 3 12" (SY)		\$60.98	18.67	\$1,138.37
Landscape Mulch (SY) Perm Grassing (AC)		\$3.58 \$1,402.20	60.00 0.00	\$214.56 \$0.00
Erosion Control Mats (SY)		\$1.87	60.00	\$112.32
Type C Silt Fence (LF) Check Dam Type C Silt Fence (LF)		\$4.24 \$6.79	180.00 180.00	\$762.48 \$1,222.56
Temporary Grassing (AC)		\$855.60 \$4.24	0.00	\$0.00 \$762.48
Erosion Control Fine Grading and Seeding (SY)		Installation Unit Cost \$4.39	Amount 16.33	Total Cost \$71.74
Eracian Control		Installation Unit Cast	Amount	Total Cast
Staging Total		.,		\$5,454.00
Temporary Pavement Temporary Drainage (Stream Diversion)		\$4,428.00	1.00	\$0.00 \$4,428.00
Staging Clearing and Grubbing (Acre)		Installation Unit Cost \$10,260.00	Amount 0.10	Total Cost \$1,026.00
Signing and Marking Total				\$0.00
Permanent Striping (LF)		\$0.71	0.00	\$0.00
Signing and Marking		Installation Unit Cost	Amount	Total Cost
Drainage Total				\$34,000.39
Trench Backfill (CY) Trench Compaction (CY)		\$2.99 \$6.36	85.80 68.64	\$256.37 \$436.55
Pipe Bedding (CY)		\$48.60	12.20	\$592.92
Class A Conc (CY) Steel (lb)		\$892.19 \$1.42	27.85 2,529.50	\$24,842.97 \$3,581.77
48" RCP	Ψ24.00	\$193.20	0.00	\$0.00
Trench Excavation (CY) 48" CMP (LF)	\$24.60	\$10.38	93.33 45.00	\$968.80 \$3,321.00
Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Roadway Total				\$3,931.16
Grading Complete (5% of Rwy Items & Drng Total \$)				\$1,806.26
End Anchorage (EA) Subtotal		\$1,380.00	0.00	\$0.00 \$2,124.90
Guardrail (LF)	\$4.88	\$49.09	0.00	\$0.00
Drain Inlet (EA) 4" Sidewalk (SY)	\$13.56	\$3,000.00 \$36.90	0.00 0.00	\$0.00
Curb and Gutter (LF)	\$28.56	\$30.60	20.00	\$1,183.20 \$0.00
Curb and Cuttor (LE)	\$0.73	\$4.87	168.00	\$941.70
Roadway Construction Pavement (SF) Curb and Cuttor (LE)		Installation Unit Cost	Amount	Total Cost

General	Information	Мар
Project ID		
Street Name	517 Westbridge Drive	
Site Visit Date	5/22/13	
Road Classification	Internal Local	
	ect Notes	Vegrawhed to
Urban typical section with Curb a		
,,	3	4 7 8
		William Annual Market Company
		Par Bridge Out Bridge Age of Party Posts
		PH-9-WED ON THE
	d Notes	
	ing Site Features)	1.9
Existing Road Laneage	2-12'	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Existing Shld Width (paved an		2 2 3
Existing Side Slopes	Flat	Sand Significant of the sand o
Existing Guardrail	None	
Depth fm Pavement to Top of (		
Pipe Type and Size	54" CMP	F Sales
Pipe Condition (1-5) (1 is new)	4	Eirehouse Ro
Condition Notes: 0.5' drop; 1' of	sand in pipe (45' pipe length);	Janes Dr
Capacity Issue		
Pavement Type/Condition		
Pavement Type/Condition		Stage Construction Options
Environme	ental Features	Close Location to Traffic
Wetlands	None	Maintain One Lane - No Temp Pavement X
Ditches	None	Maintain One Lane - No Temp Pavement
		Stage Construction Notes: Stage const. such that one lane is oper
		at all times
Utilities (Vis	sual Inspection)	
Electric	Buried	
Cable	Buried	
Phone	Buried	
Gas		
Water	Buried	
Sewer		
Other		
	Propose	ed 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				
Туре	Notes	Total		
Design	Includes 10% Construction Cost and surveying needs	\$10,091		
Right of Way Cost	Assuming project extends 2,000 sf beyond ROW	\$8,000		
Utility Relocation Cost	Buried utilities	\$14,080		
Construction Cost	Assuming 1/10 acre clearing and grubbing	\$50,911		
Environmental Permits	Assuming minimal environmental permitting required	\$10,000		
	Total Planning Estimate	\$93,082		







Photo 1:



Photo 2:

5/21/2013

Taken By:

David King

Page:

Permanent Easement ROW Total			\$ 4.00		\$ 8,000.00 \$ 8,000.00
Utility Relocation Total  Right of Way (Sq Ft)			Cost/ Sq Ft	Sq Ft	\$14,080.00 Total Cost
Sewer 12" main	\$	16.50	\$ 82.50	0.00 0.00	
8" main Relocate Fire Hydrant (EA)	\$	16.50	\$ 93.50 \$ 2,609.22		\$ 4,400.00 \$ -
4" main Water	\$	16.50	\$ 66.00		\$ -
Wooden Pole Gas	\$	82.50	\$ 605.00		\$ -
Aerial Buried	\$ \$	11.00 16.50	\$ 27.50 \$ 55.00	40.00	\$ - \$ 2,860.00
Cable					
Buried Wooden Pole	\$	16.50 82.50	\$ 55.00 \$ 605.00	40.00	\$ 2,860.00 \$ -
Phone Aerial	\$	11.00	\$ 27.50		\$ -
Wooden Pole	\$	82.50	\$ 605.00		\$ 3,960.00
Aerial Buried	\$ \$	11.00 16.50	\$ 55.00 \$ 82.50		\$ - \$ 3,960.00
Utility Relocation Electric	Removal Uni	t Cost	Installation Unit Cost	Amount	Total Cost
Construction Cost Grand Total					\$50,911.02
Traffic Control (8% of Construction Total \$)					\$ 3,771.19
Construction Cost Total					\$47,139.83
Erosion Control Total					\$ 3,628.87
4" Ditch Paving (SY)			\$ 54.65	0.00	\$ -
Rip Rap Type 3 12" (SY) Plastic Filter Fabric (SY)			\$ 60.98 \$ 5.72	18.67	\$ 1,138.37
Landscape Mulch (SY) Perm Grassing (AC)			\$ 3.58 \$ 1,402.20		
Check Dam Type C Silt Fence (LF) Erosion Control Mats (SY)			\$ 6.79 \$ 1.87	60.00	
Type C Silt Fence (LF)			\$ 4.24	180.00	\$ 762.48
Fine Grading and Seeding (SY) Temporary Grassing (AC)			\$ 4.39 \$ 855.60	16.33 0.00	
Erosion Control			Installation Unit Cost	Amount	Total Cost
Staging Total					\$ 5,454.00
Temporary Drainage (Stream Diversion)			\$ 4,428.00	1.00	\$ 4,428.00
Clearing and Grubbing (Acre) Temporary Pavement			\$ 10,260.00		\$ -
Staging			Installation Unit Cost	Amount	Total Cost
Signing and Marking Total					\$ -
Permanent Striping (LF)			\$ 0.71	0.00	\$ -
Signing and Marking			Installation Unit Cost	Amount	Total Cost
Drainage Total					\$34,119.83
Trench Backfill (CY) Trench Compaction (CY)			\$ 2.99 \$ 6.36		
Steel (lb) Pipe Bedding (CY)			\$ 1.42 \$ 48.60	,	\$ 3,581.77 \$ 592.92
Class A Conc (CY)			\$ 892.19		\$24,842.97
54" CMP (LF) 54" RCP	\$	24.60	\$ 233.28	45.00	\$ 3,321.00
Drainage Trench Excavation (CY)	Removal Uni	Cost	Installation Unit Cost \$ 10.38	Amount 99.17	Total Cost \$ 1,029.35
Roadway Total					\$ 3,937.13
Grading Complete (5% of Rwy Items & Drng Total \$)					\$ 1,812.24
Subtotal					\$ 2,124.90
Guardrail (LF) End Anchorage (EA)	Φ	4.88	\$ 49.09 \$ 1,380.00	0.00 0.00	\$ -
4" Sidewalk (SY)	\$ \$	13.56	\$ 36.90	0.00	\$ -
Curb and Gutter (LF) Drain Inlet (EA)	\$	28.56	\$ 30.60 \$ 3,000.00		\$ 1,183.20 \$ -
Pavement (SF)	\$	0.73	\$ 4.87	168.00	\$ 941.70
Roadway Construction	Removal Uni	t Cost	Installation Unit Cost	Amount	Total Cost