

General Information		Map	
Project ID			
Street Name	Lees Mill Rd		
Site Visit Date	1/20/2016		
Road Classification	Rural		
Project Notes			
Culvert replacement alternatives to provide flow capacity for the 100 year storm peak runoff.			
Field Notes			
Design (Existing Site Features)			
Existing Road Laneage	2-12'		
Existing Shld Width (paved and grass) (feet)			
Existing Side Slopes			
Existing Guardrail	No		
Depth fm Pavement to Top of Culvert (ft):	(+/-) 5.2'		
Pipe Type and Size	3 - 72" CMP		
Pipe Condition (1-5) (1 is new)	5		
Condition Notes: Existing culverts do not provide service for the 100 yr storm event.			
Pavement Type/Condition	Asphalt/Good		
Environmental Features			
Wetlands	TBD		
Ditches	YES		
State Waters	YES		
Utilities (Visual Inspection)			
Electric	Aerial		
Cable	Unknown		
Phone	Unknown		
Gas	Underground		
Water	Underground		
Sewer	Underground		
Other			
Proposed Design		Stage Construction Options	
Roadway Section	Typical	Close Location to Traffic	X
Culvert Size & Material	2-8'X7' Concrete Box Culvert with associated wing walls and rip-rap.	Maintain One Lane - No Temp Pavement	
Utility Relocations	16" Waterline	Maintain One Lane - Temp Pavement	
Guardrail Replacement		Stage Construction Notes:	
Miscellaneous Features		Assumed road closure	
Planning Cost Estimate			
Type	Notes	Total	
Design	Actual Cost including Environmental Permitting and Eng of Record Administrative Fee	\$51,470	
Right of Way Cost	Assuming UPS/DWS ends extends past ROW 1/20 acre	\$17,424	
Utility Relocation Cost		\$132,521	
Construction Cost	Includes 1/8 acre clearing and grubbing, guardrail installation	\$310,434	
Total Planning Estimate		\$511,849	



Photo 1:



Photo 2:

Lees Mill Road

Photo Date:

1/05/2016

Taken By:

Tony Hicks

Page:

1



Photo 3:



Photo 4:

Lees Mill Road

Photo Date:

12/24/2015

Taken By:

Homeowner

Page:

2

Roadway Construction, Utility Relocation and ROW Quantity Calculations

Roadway Construction	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Pavement (SF)	\$ 0.73	\$ 4.87	1200.00	\$ 6,726.40
Curb and Gutter (LF)	-	\$ 18.42	0.00	\$ -
4" Sidewalk (SY)	-	\$ 36.90	0.00	0
Guardrail (LF)	-	\$ 49.09	110.00	5400.12
End Anchorage (EA)	-	\$ 1,380.00	4.00	5520
Subtotal				\$ 17,646.52
Grading Complete (5% of Rwy Items & Dmg Total \$)				\$ 10,792.91
Roadway Total				\$ 28,439.43

Drainage	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Trench Excavation (CY)		\$ 10.38	554.65	\$ 5,757.30
72" CMP (LF)	\$ 54.00		180.00	\$ 9,720.00
2-8'X7' Box Culvert (CY)		\$ 892.19	154.98	\$ 138,271.61
Box Culvert Wingwalls, Parapetes (CY)		\$ 892.19	20.82	\$ 18,575.40
Steel (lb)		\$ 1.42	15023.40	\$ 21,333.23
Culvert Bedding (CY)		\$ 48.60	32.60	\$ 1,584.36
Trench Backfill (CY)		\$ 2.99	367.73	\$ 1,098.77
Trench Compaction (CY)		\$ 6.36	294.18	\$ 1,870.99
Drainage Total				\$ 198,211.64

Signing and Marking	Installation Unit Cost	Amount	Total Cost
Permanent Striping (LF)	\$ 0.71	50	\$ 35.40

Signing and Marking Total			\$ 35.40
----------------------------------	--	--	-----------------

Staging	Installation Unit Cost	Amount	Total Cost
Clearing and Grubbing (Acre)	\$ 10,260.00	0.13	\$ 1,282.50
Temporary Pavement		0.00	0
Temporary Drainage (Stream Pump Around)	\$ 30,000.00	1.00	\$ 30,000.00
Staging Total			\$ 31,317.90

Erosion Control	Installation Unit Cost	Amount	Total Cost
Fine Grading and Seeding (SY)	\$ 4.39	100.00	\$ 439.20
Temporary Grassing (AC)	\$ 855.60	0.00	\$ -
Type C Silt Fence (LF)	\$ 4.24	168.00	\$ 711.65
Check Dam Type C Silt Fence (LF)	\$ 6.79	0.00	\$ -
Erosion Control Mats (SY)	\$ 1.87	0.00	\$ -
Landscape Mulch (SY)	\$ 3.58	0.00	\$ -
Perm Grassing (AC)	\$ 1,402.20	0.00	\$ -
Rip Rap Type 3 12" (SY)	\$ 60.98	340.00	\$ 20,734.56
Plastic Filter Fabric (SY)	\$ 5.72	340.00	\$ 1,946.16
4" Ditch Paving (SY)	\$ 54.65	0.00	\$ -
Ditch Adjustment/Grading (LS)	\$ 5,000.00	1.00	\$ 5,000.00
Erosion Control Total			\$ 28,831.57

Construction Cost Total			\$ 286,835.94
--------------------------------	--	--	----------------------

Traffic Control (8% of Construction Total \$)			\$ 22,946.88
---	--	--	---------------------

Public Works Costs			651
--------------------	--	--	-----

Construction Cost Grand Total			\$ 310,433.81
--------------------------------------	--	--	----------------------

Utility Relocation	Removal Unit Cost	Installation Unit Cost	Amount	Total Cost
Electric				
Aerial	\$ 11.00	\$ 55.00	0.00	\$ -
Buried	\$ 16.50	\$ 82.50	0.00	\$ -
Wooden Pole	\$ 82.50	\$ 605.00	0.00	\$ -
Phone				
Aerial	\$ 11.00	\$ 27.50	0.00	\$ -
Buried	\$ 16.50	\$ 55.00	0.00	\$ -
Wooden Pole	\$ 82.50	\$ 605.00	0.00	\$ -
Cable				
Aerial	\$ 11.00	\$ 27.50	0.00	\$ -
Buried	\$ 16.50	\$ 55.00	0.00	\$ -
Wooden Pole	\$ 82.50	\$ 605.00	0.00	\$ -
Gas				
4" main	\$ 16.50	\$ 66.00	0.00	\$ -
Water				
Cap and Remove (EA)		\$ 3,045.00	1.00	\$ 3,045.00
16" Watermain (LF)		\$ 203.73	200.00	\$ 40,746.00
16" Gate Valve (EA)		\$ 7,885.00	2.00	\$ 15,770.00
20" Steel Casing (LF)		\$ 162.00	120.00	\$ 19,440.00
16" Jack and Bore (EA)		\$ 396.00	120.00	\$ 47,520.00
16" 45 degree MJ Bend (EA)		\$ 1,500.00	4.00	\$ 6,000.00
Utility Relocation Total				\$ 132,521.00

Right of Way (Sq Ft)	Cost/ Sq Ft	Sq Ft	Total Cost
Permanent Easement	\$ 4.00	4356.00	\$ 17,424.00
ROW Total			\$ 17,424.00