

3/22/2019  
03/28/2019 - Rev per Call  
03/29/2019 - Rev per Call

**Morgan Falls**  
**150 UDL's**  
**Gwinnett County, GA**  
**Plan Date: Precision 06/19/18**

Construction Phases	Original Costs		Contingent Costs		Total Cost	
	Phase Total	Per Unit Total	Phase Total	Per Unit Total	Phase Total	Per Unit
<b>LAND COST</b>						
Land Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Subtotal</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>TYPICAL DEVELOPMENT COSTS</b>						
Clearing & Grading	\$1,334,386.80	\$8,895.91	\$171,200.00	\$1,141.33	\$1,505,586.80	\$10,037.25
Detention Pond	\$347,314.00	\$2,315.43	\$465,200.00	\$3,101.33	\$812,514.00	\$5,416.76
Sanitary Sewer	\$713,284.00	\$4,755.23	\$89,686.00	\$597.91	\$802,970.00	\$5,353.13
Large Lift Station	\$1,058,973.50	\$7,059.82	\$20,000.00	\$133.33	\$1,078,973.50	\$7,193.16
Storm Drain	\$859,808.00	\$5,732.05	\$130,308.50	\$868.72	\$990,116.50	\$6,600.78
Waterline	\$411,945.00	\$2,746.30	\$9,780.00	\$65.20	\$421,725.00	\$2,811.50
Erosion Control / Maintenance	\$448,102.00	\$2,987.35	\$67,215.30	\$448.10	\$515,317.30	\$3,435.45
Curb	\$315,790.00	\$2,105.27	\$24,020.00	\$160.13	\$339,810.00	\$2,265.40
Paving	\$583,100.00	\$3,887.33	\$69,658.00	\$464.39	\$652,758.00	\$4,351.72
Work Along Main Rd	\$282,165.00	\$1,881.10	\$50,000.00	\$333.33	\$332,165.00	\$2,214.43
Dry Utilities	\$502,190.00	\$3,347.93	\$0.00	\$0.00	\$502,190.00	\$3,347.93
Potential Dry Utility Savings	-\$378,440.00	-\$2,522.93	\$0.00	\$0.00	-\$378,440.00	-\$2,522.93
Engineering & Surveying	\$281,000.00	\$1,873.33	\$10,000.00	\$66.67	\$291,000.00	\$1,940.00
Development Management Fee	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Subtotal</b>	<b>\$6,759,618.30</b>	<b>\$45,064.12</b>	<b>\$1,107,067.80</b>	<b>\$7,380.45</b>	<b>\$7,866,686.10</b>	<b>\$52,444.57</b>
<b>LAND+DEVELOPMENT COSTS</b>	<b>\$6,759,618.30</b>	<b>\$45,064.12</b>	<b>\$1,107,067.80</b>	<b>\$7,380.45</b>	<b>\$7,866,686.10</b>	<b>\$52,444.57</b>
<b>OTHER DEVELOPMENT COSTS</b>						
Landscaping	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Amenity Budget	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Subtotal</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>BUILDER COSTS</b>						
Builder Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Subtotal</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>Totals</b>	<b>\$6,759,618.30</b>	<b>\$45,064.12</b>	<b>\$1,107,067.80</b>	<b>\$7,380.45</b>	<b>\$7,866,686.10</b>	<b>\$52,444.57</b>
<b>Total Estimated Contingency Percent</b>	<b>16%</b>					

<b>Land</b>		<b>Cost Per Unit</b>		
0.00	ls Land Cost	\$0.00	\$0.00	\$0.00
	<b>Total</b>		<b>\$0.00</b>	<b>\$0.00 Cost Per Unit</b>
	<b>Total Land Cost</b>		<b>\$0.00</b>	<b>\$0.00 Total Cost Per Unit</b>

<b>Clearing &amp; Grading</b>		<b>Cost Per Unit</b>		
43.00	ac Site Clear/Grind & Haul Off	\$7,200.00	\$309,600.00	\$2,064.00
2,330.00	ft Easement Clear	\$12.00	\$27,960.00	\$186.40
202,589.00	cy Site Grading	\$2.45	\$496,343.05	\$3,308.95
35,675.00	cy Site Stripping (6" depth)	\$2.45	\$87,403.75	\$582.69
150.00	ea Lot Padding	\$500.00	\$75,000.00	\$500.00
1.00	ls Traffic Signage	\$5,500.00	\$5,500.00	\$36.67
1.00	ls Misc Trash'	\$5,500.00	\$5,500.00	\$36.67
7,050.00	sf 5' Sidewalk Grading (Common Area)	\$0.50	\$3,525.00	\$23.50
323.00	ft Wall Excavation	\$25.00	\$8,075.00	\$53.83
5,500.00	sf Modular Wall Installation	\$17.50	\$96,250.00	\$641.67
323.00	ft Fencing Around Wall	\$20.00	6,460.00	\$43.07
12,380.00	ft Curb Backfill	\$1.50	\$18,570.00	\$123.80
5,000.00	cy Mine Area for Topsoil	\$2.45	\$12,250.00	\$81.67
5,000.00	cy Rehandle Topsoil	\$2.45	\$12,250.00	\$81.67
2,500.00	cy Mass Rock	\$18.00	\$45,000.00	\$300.00
1,900.00	cy Mass Rock UC 2'	\$18.00	\$34,200.00	\$228.00
5,250.00	cy Rip Rock	\$5.00	\$26,250.00	\$175.00
8,250.00	cy Rip Rock UC 2'	\$5.00	\$41,250.00	\$275.00
18,400.00	sy Sub Grade Prep (23' Width)	\$1.25	\$23,000.00	\$153.33
	<b>Total</b>		<b>\$1,334,386.80</b>	<b>\$8,895.91 Cost Per Unit</b>

<b>Clearing &amp; Grading Contingencies</b>				
5,000.00	cy Mine Area for Topsoil	\$2.45	\$12,250.00	\$81.67
5,000.00	cy Rehandle Topsoil	\$2.45	\$12,250.00	\$81.67
2,500.00	cy Mass Rock	\$18.00	\$45,000.00	\$300.00
1,900.00	cy Mass Rock UC 2'	\$18.00	\$34,200.00	\$228.00
5,250.00	cy Rip Rock	\$5.00	\$26,250.00	\$175.00
8,250.00	cy Rip Rock UC 2'	\$5.00	\$41,250.00	\$275.00
	<b>Total</b>		<b>\$171,200.00</b>	<b>\$1,141.33 Cost Per Unit</b>
	<b>Total Clearing &amp; Grading Cost</b>		<b>\$1,505,586.80</b>	<b>\$10,037.25 Total Cost Per Unit</b>

<b>Detention Pond</b>					
760.00	ft	Wall Excavation	\$17.00	12,920.00	\$86.13
10,600.00	sf	Modular Wall Installation	\$18.00	190,800.00	\$1,272.00
2.00	ea	36"/54" Sleeve	\$5,500.00	11,000.00	\$73.33
760.00	ft	Fencing Around Wall	\$35.00	26,600.00	\$177.33
2.00	ea	OCS 8.5 Height	\$7,500.00	15,000.00	\$100.00
56.00	ft	42" RCP Installation	\$125.00	7,000.00	\$46.67
1.00	ea	42" RCP Headwall	\$1,750.00	1,750.00	\$11.67
2.00	ea	Anti Seep Collar	\$1,350.00	2,700.00	\$18.00
2.00	ea	Install Skimmers	\$3,950.00	7,900.00	\$52.67
2.00	ea	Trash Rack	\$1,950.00	\$3,900.00	\$26.00
2.00	ea	Silt Markers	\$550.00	\$1,100.00	\$7.33
2.00	ea	Fine Grade Pond	\$7,500.00	\$15,000.00	\$100.00
2.00	ea	Micro Pool Excavation	\$3,500.00	\$7,000.00	\$46.67
320.00	tn	Rip Rap Forebay	\$65.00	\$20,800.00	\$138.67
580.00	ft	6' Tall Fence w/Gate (Small)	\$18.00	\$10,440.00	\$69.60
1.00	ea	Water Quality Device w/Pipe & HW	\$3,750.00	\$3,750.00	\$25.00
72.00	tn	Filter Stone	\$42.00	\$3,024.00	\$20.16
1.00	ea	Half Round	\$1,950.00	\$1,950.00	\$13.00
72.00	tn	Rip Rap	\$65.00	\$4,680.00	\$31.20
<b>Total</b>				<b>\$347,314.00</b>	<b>\$2,315.43 Cost Per Unit</b>
<b>Detention Pond Contingencies</b>					
2.00	ea	Maintain Existing Ponds	\$10,000.00	\$20,000.00	\$133.33
10,600.00	sf	Additional Cost for Concrete Wall (If Required)	\$42.00	\$445,200.00	\$2,968.00
<b>Total Detention Pond Contingencies</b>				<b>\$465,200.00</b>	<b>\$3,101.33 Cost Per Unit</b>
<b>Total Detention Pond Costs</b>				<b>\$812,514.00</b>	<b>\$5,416.76 Total Cost Per Unit</b>

There were no details on pond 2, and plans stated that it would be permitted with the amenity. Budget quantities above, reflect both pond 1 and 2.

<b>Sanitary Sewer</b>					
5,624.00	ft	8" PVC 0-10' depth	\$20.00	\$112,480.00	\$749.87
921.00	ft	8" PVC 10-12' depth	\$21.00	\$19,341.00	\$128.94
336.00	ft	8" PVC 12-14' depth	\$23.00	\$7,728.00	\$51.52
154.00	ft	8" PVC 14-16' depth	\$26.00	\$4,004.00	\$26.69
40.00	ft	8" PVC 16-18' depth	\$30.00	\$1,200.00	\$8.00
20.00	ft	8" PVC 18-20' depth	\$35.00	\$700.00	\$4.67
2,341.00	tn	Bedding Stone	\$35.00	\$81,935.00	\$546.23
2,500.00	ft	8" DIP Additional	\$18.00	\$45,000.00	\$300.00
21.00	ea	8" Adapters	\$125.00	\$2,625.00	\$17.50
5,134.00	ft	6" PVC All Depth	\$16.00	\$82,144.00	\$547.63
1,980.00	ft	6" DIP Additional	\$15.00	\$29,700.00	\$198.00
55.00	ea	6" Solid Sleeve Adapters	\$125.00	\$6,875.00	\$45.83
151.00	ea	6" Services	\$275.00	\$41,525.00	\$276.83
55.00	ea	6" DIP Service Additional	\$350.00	\$19,250.00	\$128.33
151.00	ea	Clean-out Assembly	\$295.00	\$44,545.00	\$296.97
358.00	ft	4' dia Manhole Construction	\$195.00	\$69,810.00	\$465.40
40.00	ea	4' dia Base	\$215.00	\$8,600.00	\$57.33
80.00	ea	8" Boots	\$110.00	\$8,800.00	\$58.67
20.00	ea	6" Boots	\$110.00	\$2,200.00	\$14.67
27.00	ea	Ring & Cover	\$550.00	\$14,850.00	\$99.00
13.00	ea	WT Ring & Cover	\$750.00	\$9,750.00	\$65.00
27.00	ea	Adjust to Grade	\$550.00	\$14,850.00	\$99.00
40.00	ea	Inverts	\$550.00	\$22,000.00	\$146.67
100.00	ea	16" Cased Bore	\$285.00	\$28,500.00	\$190.00
2.00	ea	Bore Pits	\$2,500.00	\$5,000.00	\$33.33
1.00	ls	Water Control	\$5,500.00	\$5,500.00	\$36.67
3.00	ea	Phase Tie ins	\$2,500.00	\$7,500.00	\$50.00
5,624.00	ft	Testing (Air/Mandel/TV)	\$3.00	\$16,872.00	\$112.48
<b>Total</b>				<b>\$713,284.00</b>	<b>\$4,755.23 Cost Per Unit</b>
<b>Sanitary Sewer Contingencies</b>					
1,250.00	cy	Trench Rock	\$65.00	\$81,250.00	\$541.67
5,624.00	ft	End of Main Work	\$1.50	\$8,436.00	\$56.24
<b>Total</b>				<b>\$89,686.00</b>	<b>\$597.91 Cost Per Unit</b>
<b>Total Sanitary Sewer Costs</b>				<b>\$802,970.00</b>	<b>\$5,353.13 Total Cost Per Unit</b>

<b>Large Lift Station</b>					
1.00	ls	Site Clearing/Grading	\$25,500.00	\$25,500.00	\$170.00
2,100.00	sf	6" Stone Pad	\$2.50	\$5,250.00	\$35.00
1,271.00	sf	6" Reinforced Concrete Pad (31'x41')	\$6.50	\$8,261.50	\$55.08
1,960.00	ft	Grade for Access Rd	\$10.00	\$19,600.00	\$130.67
2,435.00	sy	Asphalt (6"/1 1/2")	\$25.00	\$60,875.00	\$405.83
257.00	tn	Gravel Drive	\$36.00	\$9,252.00	\$61.68
3.00	ea	Culvert w/Headwalls	\$3,500.00	\$10,500.00	\$70.00
216.00	tn	Rip Rap	\$65.00	\$14,040.00	\$93.60
1.00	ls	Creek Crossing	\$5,000.00	\$5,000.00	\$33.33
140.00	ft	Chain Link Fence	\$25.00	\$3,500.00	\$23.33
1.00	ls	14' Swing Gate	\$1,350.00	\$1,350.00	\$9.00
1.00	ls	Testing (Soil/Concrete)	\$2,500.00	\$2,500.00	\$16.67
1.00	ls	Start-up	\$3,500.00	\$3,500.00	\$23.33
1.00	ls	Clean-up	\$2,500.00	\$2,500.00	\$16.67
1.00	ls	Scada Pole	\$1,950.00	\$1,950.00	\$13.00
1.00	ls	15' Security Pole	\$2,500.00	\$2,500.00	\$16.67
1.00	ls	Electrical Work (Panel/Control Panel/Complete)	\$29,500.00	\$29,500.00	\$196.67
1.00	ls	Submersible Pressure Transducer	\$8,500.00	\$8,500.00	\$56.67
1.00	ls	Scada/RTU Unit	\$28,500.00	\$28,500.00	\$190.00
1.00	ls	Odor Control	\$8,500.00	\$8,500.00	\$56.67
1.00	ls	Generator	\$42,000.00	\$42,000.00	\$280.00
1.00	ls	Generator Pad	\$1,950.00	\$1,950.00	\$13.00
1.00	ls	Transformer Pad	\$1,150.00	\$1,150.00	\$7.67
2.00	ea	Bollards	\$750.00	\$1,500.00	\$10.00
1.00	ls	Storage Manhole w/Epoxy Coating	\$15,500.00	\$15,500.00	\$103.33
65.00	ft	4' dia Manhole	\$215.00	\$13,975.00	\$93.17
4.00	ea	4' dia Base w/Invert & Boots	\$1,150.00	\$4,600.00	\$30.67
4.00	ea	Ring & Cover	\$750.00	\$3,000.00	\$20.00
590.00	ft	8" DIP Installation	\$65.00	\$38,350.00	\$255.67
1.00	ea	Drop Kit	\$3,750.00	\$3,750.00	\$25.00
1.00	ls	Wet Well Installation (Complete)	\$27,500.00	\$27,500.00	\$183.33
1.00	ls	Coat Wet Well	\$7,500.00	\$7,500.00	\$50.00
1.00	ls	Wet Well Piping	\$10,500.00	\$10,500.00	\$70.00
1.00	ls	Valve Vault Installation (Complete)	\$9,500.00	\$9,500.00	\$63.33
1.00	ls	Valve Vault Piping	\$11,500.00	\$11,500.00	\$76.67
1.00	ls	Floor Drain	\$750.00	\$750.00	\$5.00
1.00	ls	Pump Installation (Flygt)	\$79,500.00	\$79,500.00	\$530.00
2.00	ea	Check Valve	\$21,500.00	\$43,000.00	\$286.67
3.00	ea	Plug Valve	\$1,550.00	\$4,650.00	\$31.00
1.00	ea	By Pass Riser	\$1,350.00	\$1,350.00	\$9.00
3.00	ea	4" DI 45 deg RJ Bend	\$250.00	\$750.00	\$5.00
3.00	ea	4" DI 22.5 deg RJ Bend	\$235.00	\$705.00	\$4.70
1.00	ea	4" DI RJ Tee	\$300.00	\$300.00	\$2.00
1.00	ea	Yard Hydrant	\$1,350.00	\$1,350.00	\$9.00
2.00	ea	2" 90 deg RS Bend	\$15.00	\$30.00	\$0.20
3.00	ea	2" 22.5 deg RS Bend	\$15.00	\$45.00	\$0.30
1.00	ea	2" BFP w/ Box	\$3,950.00	\$3,950.00	\$26.33
1.00	ls	Tie into Existing Line	\$1,250.00	\$1,250.00	\$8.33

1,460.00	ft	2" PVC Installation	\$15.00	\$21,900.00	\$146.00
1.00	ls	Gas Service	\$2,500.00	\$2,500.00	\$16.67
1.00	ls	Power Cost	\$950.00	\$950.00	\$6.33
760.00	ft	Easement Clearing	\$10.00	\$7,600.00	\$50.67
1,000.00	ft	Clear along Main Rd	\$20.00	\$20,000.00	\$133.33
3,000.00	ft	Misc Erosion Control	\$5.00	\$15,000.00	\$100.00
2,200.00	ft	Grassing/SOD Budget	\$2.50	\$5,500.00	\$36.67
9,000.00	sf	Misc SOD	\$0.75	\$6,750.00	\$45.00
200.00	ls	Misc Landscaping	\$7.00	\$1,400.00	\$9.33
1,030.00	ft	Traffic Control	\$8.00	\$8,240.00	\$54.93
3,000.00	ft	4" DIP Force Main	\$45.00	\$135,000.00	\$900.00
1,360.00	ft	Poly Wrap	\$10.00	\$13,600.00	\$90.67
480.00	ft	8" Steel Casing	\$75.00	\$36,000.00	\$240.00
80.00	ft	8" Cased Bore	\$155.00	\$12,400.00	\$82.67
770.00	ft	Protecto 401 Additional	\$35.00	\$26,950.00	\$179.67
1,030.00	ft	Work along Main Rd	\$20.00	\$20,600.00	\$137.33
2.00	ea	Plug Valve	\$1,550.00	\$3,100.00	\$20.67
2.00	ea	Air Release Valve	\$8,250.00	\$16,500.00	\$110.00
10.00	ea	4" < 90 deg Bends	\$275.00	\$2,750.00	\$18.33
15.00	ea	Thrust Blocking	\$250.00	\$3,750.00	\$25.00
3,000.00	ft	Test Force Main	\$1.50	\$4,500.00	\$30.00
3.00	ea	Line Existing Manhole	\$2,500.00	\$7,500.00	\$50.00
40.00	ea	Free Bore Driveways	\$2,500.00	\$100,000.00	\$666.67
3,000.00	ft	Misc Items	\$1.00	\$3,000.00	\$20.00
1.00	ea	Tie into Existing Line	\$2,500.00	\$2,500.00	\$16.67

**Total**

**\$1,058,973.50**

**\$7,059.82 Cost Per Unit**

<b>Storm Drain</b>					
2,640.00	ft	18" CMP	\$34.00	\$89,760.00	\$598.40
906.00	ft	24" CMP	\$40.00	\$36,240.00	\$241.60
268.00	ft	30" CMP	\$47.00	\$12,596.00	\$83.97
248.00	ft	36" CMP	\$56.00	\$13,888.00	\$92.59
236.00	ft	42" CMP	\$63.00	\$14,868.00	\$99.12
736.00	ft	18" CMP Paved Inv	\$40.00	\$29,440.00	\$196.27
817.00	ft	24" CMP Paved Inv	\$48.00	\$39,216.00	\$261.44
711.00	ft	30" CMP Paved Inv	\$57.00	\$40,527.00	\$270.18
119.00	ft	36" CMP Paved Inv	\$65.00	\$7,735.00	\$51.57
125.00	ft	42" CMP Paved Inv	\$75.00	\$9,375.00	\$62.50
882.00	ft	48" CMP Paved Inv	\$85.00	\$74,970.00	\$499.80
157.00	ft	54" CMP Paved Inv	\$92.00	\$14,444.00	\$96.29
1,264.00	ft	18" RCP	\$36.00	\$45,504.00	\$303.36
96.00	ft	30" RCP	\$60.00	\$5,760.00	\$38.40
88.00	ft	36" RCP	\$75.00	\$6,600.00	\$44.00
32.00	ft	54" RCP	\$135.00	\$4,320.00	\$28.80
305.00	ft	10-15' Additional Depth	\$15.00	\$4,575.00	\$30.50
450.00	ft	4' dia Manhole	\$195.00	\$87,750.00	\$585.00
81.00	ea	4' dia Base	\$215.00	\$17,415.00	\$116.10
30.00	ft	5' dia Manhole	\$255.00	\$7,650.00	\$51.00
5.00	ea	5' dia Base	\$275.00	\$1,375.00	\$9.17
5.00	ea	5' dia Reducer	\$450.00	\$2,250.00	\$15.00
84.00	ft	6' dia Manhole	\$375.00	\$31,500.00	\$210.00
12.00	ea	6' dia Base	\$425.00	\$5,100.00	\$34.00
12.00	ea	6' dia Reducer	\$575.00	\$6,900.00	\$46.00
16.00	ft	7' dia Manhole	\$650.00	\$10,400.00	\$69.33
2.00	ea	7' dia Base	\$950.00	\$1,900.00	\$12.67
2.00	ea	7' dia Reducer	\$1,150.00	\$2,300.00	\$15.33
5.00	ea	Grate & Frame/Ped Top	\$750.00	\$3,750.00	\$25.00
76.00	ea	Round to Square	\$295.00	\$22,420.00	\$149.47
20.00	ea	Ring & Cover	\$500.00	\$10,000.00	\$66.67
81.00	ea	4' dia Splash Pad	\$400.00	\$32,400.00	\$216.00
5.00	ea	5' dia Splash Pad	\$450.00	\$2,250.00	\$15.00
12.00	ea	6' dia Splash Pad	\$500.00	\$6,000.00	\$40.00
2.00	ea	7' dia Splash Pad	\$600.00	\$1,200.00	\$8.00
1.00	ea	18" RCP Headwall	\$800.00	\$800.00	\$5.33
1.00	ea	36" RCP Headwall	\$1,150.00	\$1,150.00	\$7.67
1.00	ea	54" RCP Headwall	\$3,750.00	\$3,750.00	\$25.00
2.00	ea	30" RCP Double Headwall	\$6,500.00	\$13,000.00	\$86.67
2.00	ea	36" RCP Triple Headwall	\$9,500.00	\$19,000.00	\$126.67
180.00	tn	Bedding Stone for Crossing	\$36.00	\$6,480.00	\$43.20
1,732.00	ft	Traffic Control for ROW Storm Drain	\$10.00	\$17,320.00	\$115.47
600.00	ft	Saw Cut	\$5.00	\$3,000.00	\$20.00
2,690.00	sf	Demo Asphalt	\$2.50	\$6,725.00	\$44.83
53.00	cy	Concrete Cap	\$275.00	\$14,575.00	\$97.17
1,732.00	ft	Additional Cost along ROW	\$35.00	\$60,620.00	\$404.13
1.00	ls	Steel Plates	\$7,500.00	\$7,500.00	\$50.00
54.00	tn	Rip Rap	\$65.00	\$3,510.00	\$23.40

**Total** **\$859,808.00** **\$5,732.05 Cost Per Unit**

**Storm Drain Contingencies**

1,645.00	cy	Trench Rock	\$65.00	\$106,925.00	\$712.83
6,681.00	ft	TV Test Storm Drain	\$2.00	\$13,362.00	\$89.08
6,681.00	ft	End of Main Work	\$1.50	\$10,021.50	\$66.81

**Total** **\$130,308.50** **\$868.72 Cost Per Unit**

**Total Storm Drain Costs** **\$990,116.50** **\$6,600.78 Total Cost Per Unit**

<b>Waterline</b>					
6,520.00	ft	8" DIP Installation	31.50	205,380.00	\$1,369.20
16.00	ea	8" Fire Hydrant Assemblies	3,350.00	53,600.00	\$357.33
18.00	ea	8" Gate Valves	1,050.00	18,900.00	\$126.00
4.00	ea	8" Tee	300.00	1,200.00	\$8.00
1.00	ea	8" Cross	425.00	425.00	\$2.83
20.00	ea	8" < 90 Deg Bends	225.00	4,500.00	\$30.00
2.00	ea	8" Plug/Deadman	750.00	1,500.00	\$10.00
126.00	ea	8" Mega Lugs	85.00	10,710.00	\$71.40
8.00	ea	Cul De Sac Services	1,150.00	9,200.00	\$61.33
3.00	ea	Irrigation/Amenity Service	2,950.00	8,850.00	\$59.00
1.00	ea	Lift Station Service	3,550.00	3,550.00	\$23.67
1,500.00	ft	Power Conduit	10.50	15,750.00	\$105.00
300.00	ft	Entrance Conduit	10.50	3,150.00	\$21.00
2.00	ea	8" x 8" TS & V	5,500.00	11,000.00	\$73.33
2.00	ea	Chlorination Tap	850.00	1,700.00	\$11.33
120.00	ft	16" Cased Bore	255.00	30,600.00	\$204.00
2.00	ea	Bore Pit	1,950.00	3,900.00	\$26.00
3.00	ea	Phase Tie in's	2,500.00	7,500.00	\$50.00
6,520.00	ft	Testing	1.50	9,780.00	\$65.20
43.00	cy	Thrust Blocking	250.00	10,750.00	\$71.67
<b>Total</b>				<b>\$411,945.00</b>	<b>\$2,746.30 Cost Per Unit</b>
<b>Waterline Contingencies</b>					
6,520.00	ft	End of Maint Work	\$1.50	\$9,780.00	\$65.20
<b>Total</b>				<b>\$9,780.00</b>	<b>\$65.20 Cost Per Unit</b>
<b>Total Waterline Costs</b>				<b>\$421,725.00</b>	<b>\$2,811.50 Total Cost Per Unit</b>

<b>Erosion Control</b>					
16,800.00	ft	Type S/Hog Wire Silt Fence	\$2.15	\$36,120.00	\$240.80
12,500.00	ft	Tree Fence (Wood Stake 10' o/c)	\$1.25	\$15,625.00	\$104.17
12,380.00	ft	Type A Silt Fence Around Curb	\$1.55	\$19,189.00	\$127.93
3,500.00	ft	Brush Barrier	\$3.50	\$12,250.00	\$81.67
2.00	ea	Construction Entrance	\$2,500.00	\$5,000.00	\$33.33
180.00	tn	Redress Entrance	\$38.00	\$6,840.00	\$45.60
20.00	ac	Mulching	\$850.00	\$17,000.00	\$113.33
45.00	ac	Temp Grassing	\$1,150.00	\$51,750.00	\$345.00
38.00	ac	Perm Grassing	\$1,350.00	\$51,300.00	\$342.00
32,500.00	sy	Slope Matting	\$1.25	\$40,625.00	\$270.83
81.00	ea	Sediment Trap (Sd2-F)	\$185.00	\$14,985.00	\$99.90
76.00	ea	Sediment Trap (Sd2-P)	\$225.00	\$17,100.00	\$114.00
40.00	ea	Check Dam	\$350.00	\$14,000.00	\$93.33
300.00	ft	Temp Pipe For Creek Crossing	\$65.00	\$19,500.00	\$130.00
360.00	tn	Temp Creek Crossing Stone	\$55.00	\$19,800.00	\$132.00
1,100.00	ft	Diversion Ditch/Temp Berm	\$3.50	\$3,850.00	\$25.67
72.00	ft	Filter Ring Stone	\$32.00	\$2,304.00	\$15.36
2.00	ea	Concrete Wash Out	\$950.00	\$1,900.00	\$12.67
2.00	ea	Petro Containment	\$1,950.00	\$3,900.00	\$26.00
2.00	ea	Waste Collector Station	\$500.00	\$1,000.00	\$6.67
1.00	ea	Sd3 Large Grading	\$15,500.00	\$15,500.00	\$103.33
1.00	ls	Sd3 Grading	\$5,500.00	\$5,500.00	\$36.67
3.00	ea	Sd3 OCS w/Piping	\$9,500.00	\$28,500.00	\$190.00
54.00	tn	# 3 Stone	\$36.00	\$1,944.00	\$12.96
144.00	tn	Rip Rap	\$55.00	\$7,920.00	\$52.80
2.00	ea	Skimmers	\$3,850.00	\$7,700.00	\$51.33
60.00	mo	NPDES Monitoring	\$450.00	\$27,000.00	\$180.00

<b>Total</b>			<b>\$448,102.00</b>	<b>\$2,987.35 Total Cost Per Unit</b>
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**Erosion Control Contingencies**

1.00	ls	Erosion Control Maintenance (15%)	\$67,215.30	\$67,215.30	\$448.10
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<b>Total</b>			<b>\$67,215.30</b>	<b>\$448.10 Cost Per Unit</b>
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<b>Total Erosion Control Costs</b>			<b>\$515,317.30</b>	<b>\$3,435.45 Total Cost Per Unit</b>
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<b>Curb</b>					
12,380.00	ft	24" Curb & Gutter (Machine)	\$10.50	\$129,990.00	\$866.60
12,380.00	ft	Stone Under Curb	\$5.00	\$61,900.00	\$412.67
76.00	ea	Throats & Tops	\$1,200.00	\$91,200.00	\$608.00
6.00	ea	Handi Cap Ramps (At Entrance)	\$750.00	\$4,500.00	\$30.00
7,050.00	sf	5' Sidewalk (Common Area)	\$4.00	\$28,200.00	\$188.00

**Total** **\$315,790.00** **\$2,105.27 Cost Per Unit**

<b>Curb Contingencies</b>					
600.00	ft	Repair Curb	\$30.00	\$18,000.00	\$120.00
172.00	tn	Additional Stone (1" overall)	\$35.00	\$6,020.00	\$40.13

**Total Curb Contingencies** **\$24,020.00** **\$160.13 Cost Per Unit**

**Total Curb** **\$339,810.00** **\$2,265.40 Total Cost Per Unit**

<b>Paving (23' Paving Width)</b>					
18,400.00	sy	Light Duty Paving	\$22.00	\$404,800.00	\$2,698.67
18,400.00	sy	Topping	\$9.50	\$174,800.00	\$1,165.33
1.00	ls	Misc Striping	\$3,500.00	\$3,500.00	\$23.33

**Total** **\$583,100.00** **\$3,887.33 Cost Per Unit**

<b>Paving Contingencies</b>					
1.00	ls	Cleaning & Patching	\$46,648.00	\$46,648.00	\$310.99
767.00	tn	Additional Stone (1" overall)	\$30.00	\$23,010.00	\$153.40

**Total Paving Contingencies** **\$69,658.00** **\$464.39 Cost Per Unit**

**Total Paving** **\$652,758.00** **\$4,351.72 Total Cost Per Unit**

<b>Work Along Main Rd</b>					
3,590.00	ft	Grade along Brown Rd	\$10.00	\$35,900.00	\$239.33
3,590.00	ft	Grade/Backfill for Curb along Brown Rd	\$8.00	\$28,720.00	\$191.47
736.00	sf	Grade for Sidewalk along Brown Rd	\$10.00	\$7,360.00	\$49.07
3,590.00	ft	Saw Cut Along Brown Rd	\$3.50	\$12,565.00	\$83.77
6.00	ea	Demo Driveway	\$750.00	\$4,500.00	\$30.00
3.00	ea	Demo Cross Drains	\$550.00	\$1,650.00	\$11.00
5.00	ea	Relocate Mail Boxes	\$250.00	\$1,250.00	\$8.33
3,590.00	ft	Traffic Control along Brown Rd	\$2.50	\$8,975.00	\$59.83
3,590.00	ft	Misc Clearing along Brown Rd	\$1.50	\$5,385.00	\$35.90
3,590.00	ft	24" Curb & Gutter	\$12.00	\$43,080.00	\$287.20
3,590.00	ft	Stone Under Curb	\$5.00	\$17,950.00	\$119.67
1,840.00	sf	Driveway Apron	\$4.50	\$8,280.00	\$55.20
3,700.00	sf	Sidewalk Installation	\$4.00	\$14,800.00	\$98.67
2.00	ea	Handi Cap Ramps	\$750.00	\$1,500.00	\$10.00
150.00	cy	Class B Concrete	\$225.00	\$33,750.00	\$225.00
5,100.00	sy	1.5" Topping on Brown Rd	\$10.00	\$51,000.00	\$340.00
1.00	ls	Misc Striping	\$5,500.00	\$5,500.00	\$36.67

**Total Work Along Main Rd**

**\$282,165.00** **\$1,881.10 Cost Per Unit**

**Work Along Main Rd Contingency**

1.00	ea	Raise Power Pole Wire/Set New Poles at Entrance	\$50,000.00	\$50,000.00	\$333.33
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**Total Work Along Main Rd Contingency**

**\$50,000.00** **\$333.33 Cost Per Unit**

**Total Work Along Main Rd**

**\$332,165.00** **\$2,214.43 Total Cost Per Unit**

**Landscaping**

2.00	ea	Entrance Monument/Landscaping (Budget)	\$0.00	\$0.00	\$0.00
1,450.00	ft	Frontage Fencing	\$0.00	\$0.00	\$0.00
1,450.00	ft	ROW Planting	\$0.00	\$0.00	\$0.00
1.00	ls	Pock Park Sod/Shrub/Irrigation	\$0.00	\$0.00	\$0.00
1,850.00	ft	Walking Trail	\$0.00	\$0.00	\$0.00
212.00	ea	3" Cal Street Trees	\$0.00	\$0.00	\$0.00
300.00	ft	2" Cal Lot Trees	\$0.00	\$0.00	\$0.00

**Total Landscaping**

**\$0.00** **\$0.00 Total Cost Per Unit**

		<b>Dry Utilities/Misc.</b>				
154.00	ea	Underground Power	\$1,100.00	\$169,400.00	\$1,129.33	Jackson EMC
50.00	ea	Street Lights	\$2,200.00	\$110,000.00	\$733.33	Jackson EMC
12,380.00	ea	City of Buford Gas Main Installation	\$8.00	\$99,040.00	\$660.27	City of Buford Gas
150.00	ea	City of Buford Gas Service Tap Fee	\$650.00	\$97,500.00	\$650.00	City of Buford Gas
15.00	ea	Stop Signs (with street name blades)	\$1,350.00	\$20,250.00	\$135.00	
15.00	ea	Misc Signs	\$400.00	\$6,000.00	\$40.00	

**Total Dry Utilities** **\$502,190.00** **\$3,347.93 Total Cost Per Unit**

		<b>Potential Dry Utility Savings</b>				
1.00	ls	Potential Savings with all Electric	-\$279,400.00	-\$279,400.00	-\$1,862.67	
1.00	ls	Potential Savings with 3 or More Gas Appliances	-\$99,040.00	-\$99,040.00	-\$660.27	

**Total Potential Dry Utility Savings** **-\$378,440.00** **-\$2,522.93 Total Cost Per Unit**

There are reductions in gas costs, based on contracting with them to have three gas appliances in each home.  
 There are also reductions in power costs/incentives to go all electric with the homes.

		<b>Engineering &amp; County Fees</b>				
1.00	ls	Engineering and Surveying	\$141,000.00	\$141,000.00	\$940.00	
150.00	ea	Soil Testing	\$300.00	\$45,000.00	\$300.00	
1.00	ls	Due Diligence	\$35,000.00	\$35,000.00	\$233.33	
1.00	ls	Wall Design Fee	\$15,000.00	\$15,000.00	\$100.00	
150.00	ea	Misc Engineering	\$150.00	\$22,500.00	\$150.00	
150.00	ea	Recording Fees	\$150.00	\$22,500.00	\$150.00	

**Total** **\$281,000.00** **\$1,873.33 Cost Per Unit**

		<b>Engineering Contingencies</b>				
1.00	ls	Misc. Revisions/Inspections	\$10,000.00	\$10,000.00	\$66.67	

**Total** **\$10,000.00** **\$66.67 Cost Per Unit**

**Total Engineering Costs** **\$291,000.00** **\$1,940.00 Total Cost Per Unit**

**Morgan Falls**

**Grading based on CAD File**

Site	Cut (cy)	Fill (cy)	Fill w/20% Shrinkage(cy)	Strip (6") (cy)	Deficit/Surplus	Area (sf)	Acerage (ac)
	202,589.00	180,105.00	216,126.00	35,675.00	22,138.00	1,926,496.00	44.23
	202,589.00	180,105.00	216,126.00	35,675.00	22,138.00	1,926,496.00	44.23
	The fill material has a 20% adjustment factor Grading is based on CAD file provided				0.31		70,762.02

**Grading based on CAD File (Based on Raising Site .31')**

Site	Cut (cy)	Fill (cy)	Fill w/20% Shrinkage(cy)	Strip (6") (cy)	Deficit/Surplus	Area (sf)	Acerage (ac)
	191,520.00	189,329.17	227,195.00	35,675.00	0.00	1,926,496.00	44.23
	191,520.00	189,329.17	227,195.00	35,675.00	0.00	1,926,496.00	44.23
	The fill material has a 20% adjustment factor Grading is based on CAD file provided						

Grading Difference                      **-11,069.00 cy**