

**MAINTENANCE BOND  
CERTIFICATE  
OF  
COST ESTIMATE**

CEA Job No 21094

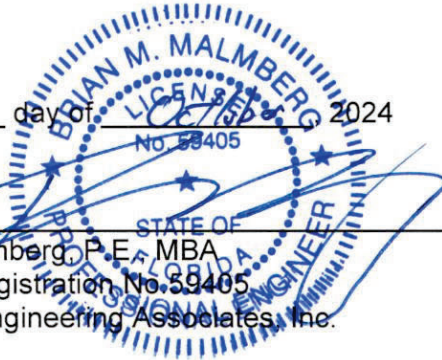
I, Brian Malmberg, a Licensed Professional Engineer in the State of Florida, hereby verify that the estimated cost of the improvements within Caldera Subdivision POD A (Platted as Caldera at Sterling Hill) located in a portion of Section 16, Township 23 South, Range 18 East, Hernando County, Florida, are accurate engineering estimates, which were prepared for the purpose of determining the amount for a Maintenance Bond to be held by Hernando County.

**SUMMARY OF COSTS (see attached schedules)**

**Phase 1 EOPC Subtotal: \$ 6,991,799.10**  
**Phase 2 EOPC Subtotal: \$1,317,346.00**  
**EOR's Opinion of Probable Cost: \$ 8,309,145.10**

**Maintenance Bond: \$8,309,145.10 x 0.20 = \$1,661,829.02**

This 8 day of October, 2024

  
\_\_\_\_\_  
Brian Malmberg, P.E., MBA  
Florida Registration No. 58405  
Coastal Engineering Associates, Inc.

**ENGINEER'S OPINION OF PROBABLE COST  
CALDERA PHASE I**

**I. General Conditions/Misc**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Survey Layout/As-builts	LS	1	\$94,450.00	\$94,450.00
Construction Materials Testing	LS	1	\$70,850.00	\$70,850.00
Construction Entrance	LS	1	\$4,750.00	\$4,750.00
Maintenance of Traffic	LS	1	\$2,500.00	\$2,500.00
Silt Fence Installation & Removal	LF	7,270	\$1.70	\$12,359.00
			<b>SUBTOTAL:</b>	<b>\$184,909.00</b>

**II. Clearing, Grubbing and Earthwork**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Clearing & Grubbing	LS	1	\$293,000.00	\$293,000.00
Excavation, Grading, Filling, Grading, Compact	CY	199,000	\$3.30	\$656,700.00
Sod DRA's, Slopes,	SY	47,100	\$3.20	\$150,720.00
Seed & Mulch Lots, Easements, Disturbed Area	SY	201,000	\$0.40	\$80,400.00
			<b>SUBTOTAL:</b>	<b>\$1,180,820.00</b>

**III. Storm Drainage**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
18" HP	LF	1,875	\$57.00	\$106,875.00
24" HP	LF	1,125	\$84.00	\$94,500.00
30" HP	LF	535	\$120.00	\$64,200.00
36" HP	LF	378	\$156.00	\$58,968.00
18" MES	EA	2	\$900.00	\$1,800.00
30" MES	EA	1	\$1,450.00	\$1,450.00
36" MES	EA	2	\$2,000.00	\$4,000.00
Type 3/4 Curb Inlet	EA	14	\$9,350.00	\$130,900.00
Type V Gutter Inlet	EA	32	\$7,100.00	\$227,200.00
Storm Manhole	EA	15	\$5,450.00	\$81,750.00
			<b>SUBTOTAL:</b>	<b>\$771,643.00</b>

**IV. Sanitary Sewer**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
8" PVC Sewer 0'-6'	LF	1,730	\$36.00	\$62,280.00
8" PVC Gravity Sewer 6'-8'	LF	2,065	\$37.00	\$76,405.00
8" PVC Gravity Sewer 8'-10'	LF	395	\$39.00	\$15,405.00
8" PVC Gravity Sewer 10'-12'	LF	330	\$43.00	\$14,190.00
8" PVC Gravity Sewer 12'-14'	LF	190	\$46.00	\$8,740.00
8" PVC Gravity Sewer 14'-16'	LF	75	\$72.00	\$5,400.00
8" PVC Gravity Sewer 16'-18'	LF	170	\$88.00	\$14,960.00

**ENGINEER'S OPINION OF PROBABLE COST  
CALDERA PHASE I**

8" PVC Gravity Sewer 18'-20'	LF	240	\$110.00	\$26,400.00
8" PVC Gravity Sewer 20'-22'	LF	145	\$125.00	\$18,125.00
8" PVC Gravity Sewer 22'-24'	LF	45	\$145.00	\$6,525.00
Manholes 0'-6'	EA	10	\$5,300.00	\$53,000.00
Manholes 6'-8'	EA	14	\$5,650.00	\$79,100.00
Manholes 8'-10'	EA	2	\$6,800.00	\$13,600.00
Manholes 10'-12'	EA	1	\$7,600.00	\$7,600.00
Manholes 10'-12' Drop	EA	1	\$8,600.00	\$8,600.00
Manholes 12'-14' Lined	EA	1	\$14,000.00	\$14,000.00
Manholes 14'-18' Lined	EA	2	\$17,000.00	\$34,000.00
Manholes 18'-20' Drop Lined	EA	1	\$20,000.00	\$20,000.00
Manholes 20'-22' Lined	EA	1	\$19,000.00	\$19,000.00
Manholes 22'-24' Lined	EA	1	\$20,000.00	\$20,000.00
Single Service	EA	39	\$1,550.00	\$60,450.00
Double services	EA	41	\$1,600.00	\$65,600.00
Gravity Sewer Testing	LF	5,385	\$9.00	\$48,465.00
6" PVC C900 FM	LF	920	\$31.00	\$28,520.00
4" PVC C900 FM	LF	120	\$24.00	\$2,880.00
6" Gate Valve	EA	3	\$2,250.00	\$6,750.00
4" Gate Valve	EA	2	\$1,950.00	\$3,900.00
6" MJ Ftg w/Restrains	EA	2	\$775.00	\$1,550.00
4" MJ Ftg w/Restrains	EA	2	\$555.00	\$1,110.00
Force Main Testing	LF	1,040	\$3.00	\$3,120.00
Pump Station Complete (a-e below)	LS	1		\$485,000.00
a. Generator (\$110,000.00)				
b. Odor Control (HiVent \$25,000)				
c. Pumps (\$72,000.00)				
d. Telemetry (\$28,000.00)				
e. WW, V Vault, Electric, Site (\$250,000)				
			<b>SUBTOTAL:</b>	<b>\$1,224,675.00</b>

**ENGINEER'S OPINION OF PROBABLE COST  
CALDERA PHASE I**

**V. Water Distribution**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Connect to Existing WM	EA	1	\$1,650.00	\$1,650.00
Temporary Jumper	EA	1	\$5,800.00	\$5,800.00
8" PVC C-900 Water Main	LF	5,760	\$46.00	\$264,960.00
8" Gate Valve	EA	20	\$3,100.00	\$62,000.00
8" MJ Bend (22.5/45) w/restraints	EA	53	\$530.00	\$28,090.00
8" MJ Tee Ftg w/restraints	EA	3	\$835.00	\$2,505.00
8" MJ Cross w/restraints	EA	1	\$1,000.00	\$1,000.00
12"x8" Reducer w/restraints	EA	2	\$710.00	\$1,420.00
Fire hydrant Assembly	EA	12	\$8,550.00	\$102,600.00
Single Service	EA	15	\$800.00	\$12,000.00
Double Service	EA	55	\$920.00	\$50,600.00
Lift Station Water Service	EA	1	\$2,400.00	\$2,400.00
Temp Blow Off	EA	2	\$905.00	\$1,810.00
Sample Point	EA	7	\$815.00	\$5,705.00
Water Line Testing/Chlorination	LF	5,760	\$3.00	\$17,280.00
			<b>SUBTOTAL:</b>	<b>\$559,820.00</b>

**VI Road Construction (Collector/Local)**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1-3/4" Type Sp-9.5	SY	10,335	\$21.00	\$217,035.00
6" Limerock Base	SY	10,335	\$12.00	\$124,020.00
1" Type SP-9.5 Collector	SY	2,695	\$15.00	\$40,425.00
1.5" Type SP-9.5 Collector	SY	2,695	\$19.00	\$51,205.00
8" Limerock Base	SY	2,695	\$15.00	\$40,425.00
12" Stabilized Subgrade	SY	13,030	\$7.00	\$91,210.00
Miami Curb	LF	8,800	\$26.00	\$228,800.00
Type F Curb	LF	1,850	\$30.00	\$55,500.00
Type E Curb	LF	255	\$35.00	\$8,925.00
5' Sidewalk	SF	11,115	\$7.00	\$77,805.00
Curb Ramp w/Tactile Surface	EA	10	\$1,250.00	\$12,500.00
Sod	SY	1,490	\$3.20	\$4,768.00
Seed & Mulch	SY	22,700	\$0.40	\$9,080.00
Striping/signage	LS	1	\$18,900.00	\$18,900.00
			<b>SUBTOTAL:</b>	<b>\$980,598.00</b>

**ENGINEER'S OPINION OF PROBABLE COST  
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**VII Sterling Hill Blvd**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
<b>Roadway</b>				
1.5 SP-9.5 (trail)	SY	1,825	\$22.00	\$40,150.00
4" Limerock Base	SY	1,825	\$10.00	\$18,250.00
1" SP-9.5 Blvd	SY	9,405	\$13.00	\$122,265.00
2" SP-12.5 Blvd	SY	9,405	\$23.00	\$216,315.00
8" Limerock Base	SY	9,405	\$15.00	\$141,075.00
12" Stabilized Subgrade	SY	11,230	\$7.00	\$78,610.00
Miami Curb	SY	4,365	\$26.00	\$113,490.00
Type F Curb	SY	4,245	\$28.50	\$120,982.50
5' Sidewalk	SF	11,725	\$7.00	\$82,075.00
Curb Ramp w/Tactile Surface	EA	6	\$1,250.00	\$7,500.00
Sod	SY	1,913	\$3.20	\$6,121.60
Striping/Signage	LS	1	\$23,500.00	\$23,500.00
			<b>SUBTOTAL:</b>	<b>\$970,334.10</b>

<b>Storm Drainage</b>				
18" HP	LF	1,240	\$57.00	\$70,680.00
24" HP	LF	240	\$84.00	\$20,160.00
30" HP	LF	745	\$120.00	\$89,400.00
36" HP	LF	450	\$156.00	\$70,200.00
Type 3/4 Curb Inlet	EA	12	\$9,350.00	\$112,200.00
Type V Gutter Inlet	EA	7	\$7,100.00	\$49,700.00
Storm Manhole	EA	4	\$5,450.00	\$21,800.00
			<b>SUBTOTAL:</b>	<b>\$434,140.00</b>

<b>Force Main</b>				
Connect to Exist FM Open Cut/Night MJ Wye	EA	1	\$10,000.00	\$10,000.00
8" PVC C900 FM	LF	35	\$46.00	\$1,610.00
8" C900 Fusible PVC FM	LF	2,565	\$120.00	\$307,800.00
8" Gate Valve	EA	9	\$3,150.00	\$28,350.00
4" Gate Valve	EA	2	\$1,950.00	\$3,900.00
8"x4" MJ Tee w/restraints	EA	2	\$800.00	\$1,600.00
8"x6" MJ Tee w/restraints	EA	1	\$1,000.00	\$1,000.00
4" MJ Cap	EA	2	\$275.00	\$550.00
8" MJ Bends w/restraints 11.25/22.5/45	EA	5	\$530.00	2650
Air Release Valve Assembly	EA	1	\$14,000.00	14000
ROW Restoration	LS	1	\$2,500.00	2500
			<b>SUBTOTAL:</b>	<b>\$373,960.00</b>

## ENGINEER'S OPINION OF PROBABLE COST CALDERA PHASE I

<b>Water Main</b>				
Temp Jumper	EA	1	\$5,800.00	\$5,800.00
12" PVC C900 Water Main	LF	2,220	\$86.00	\$190,920.00
10" PVC C900 Water Main	LF	100	\$71.00	\$7,100.00
12" Gate Valve	EA	7	\$5,400.00	\$37,800.00
10" Gate Valve	EA	1	\$4,600.00	\$4,600.00
8" Gate Valve	EA	4	\$3,100.00	\$12,400.00
12"x10" MJ Tee w/restraints	EA	1	\$1,800.00	\$1,800.00
12"x8" MJ Tee w/restraints	EA	2	\$1,500.00	\$3,000.00
12" MJ Bend w/restraints	EA	22	\$995.00	\$21,890.00
10" MJ Bend w/restraints	EA	2	\$800.00	\$1,600.00
12" MJ Tee w/restraints	EA	2	\$1,550.00	\$3,100.00
12" MJ Cross	EA	1	\$2,250.00	\$2,250.00
Fire Hydrant Assembly	EA	1	\$8,550.00	\$8,550.00
Permanent Blow Off	EA	1	\$1,500.00	\$1,500.00
Sample Point	EA	2	\$815.00	\$1,630.00
Water Line Testing/Chlorination	LF	2,320	\$3.00	\$6,960.00
			<b>SUBTOTAL:</b>	<b>\$310,900.00</b>

**STERLING HILL BLVD TOTAL: \$2,089,334.10**

### SUMMARY

General Conditions	\$184,909.00
Clearing/Earthwork	\$1,180,820.00
Storm Drainage	\$771,643.00
Sanitary Sewer	\$1,224,675.00
Water Distribution	\$559,820.00
Road Construction	\$980,598.00
Sterling Hill Blvd	\$2,089,334.10
<b>Total</b>	<b>\$6,991,799.10</b>

THIS ENGINEER'S OPINION OF PROBABLE COST IS PREPARED FOR A PERFORMANCE BOND AS REQUIRED BY HERNANDO COUNTY FOR FINAL PLAT OF DEVELOPMENT IMPROVEMENTS NOT YET COMPLETED OR ACCEPTED BY HERNANDO COUNTY.

PREPARED BY: COASTAL ENGINEERING ASSOC., INC.

Brian Malmberg, P.E. #592405



**ENGINEER'S OPINION OF PROBABLE COST  
CALDERA PHASE 2**

**I. General Conditions/Misc**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Survey Layout/As-builts	LS	1	\$42,300.00	\$42,300.00
Construction Materials Testing	LS	1	\$31,730.00	\$31,730.00
Construction Entrance	LS	1	\$4,750.00	\$4,750.00
Maintenance of Traffic	LS	1	\$2,500.00	\$2,500.00
Silt Fence Installation & Removal	LF	INCL IN PH 1		INCL IN PH 1
			<b>SUBTOTAL:</b>	<b>\$81,280.00</b>

**II. Clearing, Grubbing and Earthwork**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Clearing & Grubbing	LS	INCL IN PH 1		INCL IN PH 1
Excavation, Grading, Filling, Grading, Compact	CY	INCL IN PH 1		INCL IN PH 1
Sod DRA's, Slopes,	SY	INCL IN PH 1		INCL IN PH 1
Seed & Mulch Lots, Easements, Disturbed Area	SY	39,415	\$0.40	\$15,766.00
			<b>SUBTOTAL:</b>	<b>\$15,766.00</b>

**III. Storm Drainage**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
18" HP	LF	1,115	\$57.00	\$63,555.00
24" HP	LF	460	\$84.00	\$38,640.00
30" HP	LF	500	\$120.00	\$60,000.00
30" MES	EA	1	\$1,450.00	\$1,450.00
Type V Gutter Inlet	EA	14	\$7,100.00	\$99,400.00
Storm Manhole	EA	7	\$5,450.00	\$38,150.00
Rip Rap	EA	1	\$1,300.00	\$1,300.00
			<b>SUBTOTAL:</b>	<b>\$302,495.00</b>

**IV. Sanitary Sewer**

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
8" PVC Sewer 0'-6'	LF	1,040	\$36.00	\$37,440.00
8" PVC Gravity Sewer 6'-8'	LF	835	\$37.00	\$30,895.00
8" PVC Gravity Sewer 8'-10'	LF	200	\$39.00	\$7,800.00
8" PVC Gravity Sewer 10'-12'	LF	160	\$43.00	\$6,880.00
Manholes 0'-6'	EA	7	\$5,300.00	\$37,100.00
Manholes 6'-8'	EA	5	\$5,650.00	\$28,250.00
Manholes 8'-10'	EA	2	\$6,800.00	\$13,600.00
Manholes 10'-12'	EA	1	\$7,600.00	\$7,600.00
Single Service	EA	30	\$1,550.00	\$46,500.00
Double services	EA	19	\$1,600.00	\$30,400.00
Gravity Sewer Testing	LF	2,235	\$9.00	\$20,115.00
			<b>SUBTOTAL:</b>	<b>\$266,580.00</b>

