



**Thomas L. Knight, P.E.**  
**Professional Association**  
Planning, Design, Permitting, Inspection

August 13, 2015

Ken Comia  
City of Groveland  
156 S. Lake Avenue  
Groveland, Florida 34736

Re: Cypress Oaks, Phase 1 – Final Plat  
Application No. 2015-65

Dear Ken:


I am in receipt of your August 10, 2015 letter to Ben Snyder, Royal Oak Homes wherein you list the final plat review comments from the City Attorney and the City Surveyor. This letter is in response to the City Attorney's comments regarding the cost of construction, the performance bond and the maintenance bond.

Please refer to the attached Construction Cost Estimate for Cypress Oaks, Phase 1. This is a complete breakdown of all construction units, quantities, unit prices and costs. The total construction cost estimate for Cypress Oaks, Phase 1 is \$2,044,809.27. Please be advised that this cost does not include the improvements to CR 565A. A separate bond has been posted for the offsite work.

Please refer to the attached Construction Cost Estimate for Cypress Oaks, Phase 1, Maintenance Bond & Performance Bond. This is a complete breakdown of the total construction cost estimate, the construction cost estimate of completed work and the balance, which is the construction cost estimate of the remaining work. The estimated construction cost of the completed work is \$1,293,163.66. The amount of the maintenance bond is 20% of this value or \$258,632.66. The estimate construction cost of the remaining work is \$751,645.98. The amount of the performance bond is 110% of this value or \$826,810.58.

Should you have any questions or need additional information, please do not hesitate to contact me at (352) 267-4516 or [tknight@knighteng.com](mailto:tknight@knighteng.com).

Sincerely,

  
Thomas L. Knight, P.E.  
President

Cc: Ben Snyder  
Rick Perkinson

# CONSTRUCTION COST ESTIMATE

## FOR CYPRESS OAKS, PHASE 1

DATE: AUGUST 12, 2015

Description	Unit	Quantity	Unit Price	Total
<b>SITE WORK</b>				
Mobilization	LS	1	3,500.00	3,500.00
Survey - Construction Layout and As-Builts	LS	1	17,500.00	17,500.00
Erosion Control / Dust Abatement / NPDES	LS	1	5,000.00	5,000.00
Silt Fence	LF	9,000.00	1.50	13,500.00
Clear and Grub	AC.	34.0	1,300.00	44,200.00
Earthwork (R/W, Ponds and Open Space)	CY	50,229	2.25	113,015.25
Earthwork (Lots)	CY	33,218	2.25	74,740.50
Final Grading (R/W, Ponds and Open Space)	SY	151,100	0.25	37,775.00
Final Grading (Lots)	LS	108	150.00	16,200.00
Saw-Cut and Remove Existing Trail Section	LS	1	2,500.00	2,500.00
Seed and Mulch (Ponds and Flood Comp)	SY	13,644	0.35	4,775.40
Seed and Mulch (Lots)	SY	71,000	0.35	24,850.00
Sodding (R/W, Ponds, Open Space and Sewer)	SY	37,877	1.60	60,603.20
Sodding (Lot Slopes)	SY	4,362	1.60	6,979.20
Retaining Wall w/Safety Railing	LF	470.0	160.00	75,200.00
Entrance Sign Walls w/Electrical & Lighting	LS	1	50,755.00	50,755.00
Landscaping & Irrigation	LS	1	131,885.00	131,885.00
6' PVC Fence	LF	755	18.00	13,590.00
Testing	LS	1	30,550.00	30,550.00
<b>SITE WORK SUBTOTAL</b>				<b>727,118.55</b>
<b>SANITARY SEWER</b>				
8" PVC Pipe 0-6' Cut (SDR35)	LF	1,290.00	15.00	19,350.00
8" PVC Pipe 6'-8' Cut (SDR35)	LF	1,035.00	16.50	17,077.50
10" PVC Pipe 0-6' Cut (SDR35)	LF	2,321.30	17.50	40,622.75
10" PVC Pipe 6'-8' Cut (SDR35)	LF	558.96	19.50	10,899.72
10" PVC Pipe 8'-10' Cut (SDR35)	LF	145.17	21.00	3,048.57
10" PVC Pipe 10'-12' Cut (SDR35)	LF	115.10	23.00	2,647.30
10" PVC Pipe 12'-14' Cut (SDR35)	LF	84.57	25.00	2,114.25
10" PVC Pipe 8'-10' Cut (SDR26)	LF	33.31	23.00	766.13
10" PVC Pipe 10'-12' Cut (SDR26)	LF	159.46	25.00	3,986.50
10" PVC Pipe 12'-14' Cut (SDR26)	LF	170.00	27.00	4,590.00
Standard Manhole 0-6' Cut	EA	9	2,400.00	21,600.00
Standard Manhole 6'-8' Cut	EA	11	2,550.00	28,050.00
Standard Manhole 8'-10' Cut	EA	1	3,200.00	3,200.00
Standard Manhole 10'-12' Cut	EA	3	3,250.00	9,750.00
Standard Manhole 12'-14' Cut	EA	1	3,500.00	3,500.00
Standard Manhole 6'-8' Cut (fiberglass lined)	EA	1	5,500.00	5,500.00
Single Service	EA	12	675.00	8,100.00
Double Service	EA	48	700.00	33,600.00
Testing	LS	1	15,000.00	15,000.00
<b>SANITARY SEWER SUBTOTAL</b>				<b>233,402.72</b>



<b>STORM DRAINAGE</b>				
18" RCP	LF	3,264.00	27.50	89,760.00
24" RCP	LF	670.00	32.50	21,775.00
30" RCP	LF	386.00	41.50	16,019.00
Type 5 Curb Inlet	EA	30	3,650.00	109,500.00
Type 6 Curb Inlet	EA	6	4,150.00	24,900.00
Standard Manhole 4' Dia. (FDOT-P)	EA	2	2,100.00	4,200.00
Type "C" Inlet	EA	3	1,750.00	5,250.00
18" M.E.S. w/Dissipator Pad	EA	4	900.00	3,600.00
24" M.E.S. w/Dissipator Pad	EA	1	1,000.00	1,000.00
30" M.E.S. w/Dissipator Pad	EA	1	1,100.00	1,100.00
Plug 18" Pipe	EA	2	500.00	1,000.00
<b>STORM DRAINAGE SUBTOTAL</b>				<b>278,104.00</b>
<b>POTABLE WATER SYSTEM</b>				
8" SDR-11 HDPE	LF	64.00	50.00	3,200.00
8" PVC Pipe C-900 (DR-18)	LF	1,223.00	15.00	18,345.00
6" PVC Pipe C-900 (DR-18)	LF	4,067.00	11.00	44,737.00
8" Gate Valve w/Box	EA	9	1,350.00	12,150.00
6" Gate Valve w/Box	EA	16	1,100.00	17,600.00
2" Blow-Off Assembly	EA	3	400.00	1,200.00
Single Service	EA	10	500.00	5,000.00
Double Service	EA	49	700.00	34,300.00
Fire Hydrant (w/Valve)	EA	9	3,500.00	31,500.00
Temporary Jumper Assembly	EA	1	1,250.00	1,250.00
8" RPZ Backflow Preventor	EA	1	7,500.00	7,500.00
MJ Fittings	LS	1	10,000.00	10,000.00
Restraints	LS	1	3,600.00	3,600.00
10" Wet Tap and Valve	LS	1	5,000.00	5,000.00
Testing and Bactys	LS	1	3,500.00	3,500.00
<b>POTABLE WATER SUBTOTAL</b>				<b>198,882.00</b>
<b>RECLAIMED WATER SYSTEM</b>				
8" PVC Pipe C-900 (DR-18)	LF	1,204.00	15.00	18,060.00
6" PVC Pipe C-900 (DR-18)	LF	3,793.00	11.00	41,723.00
8" Gate Valve w/Box	EA	9	1,350.00	12,150.00
6" Gate Valve w/Box	EA	16	1,100.00	17,600.00
2" Blow Off Valve Assembly	EA	3	400.00	1,200.00
Single Service	EA	12	500.00	6,000.00
Double Service	EA	48	700.00	33,600.00
MJ Fittings	LS	1	18,500.00	18,500.00
Testing	LS	1	1,500.00	1,500.00
<b>RECLAIMED WATER SUBTOTAL</b>				<b>150,333.00</b>
<b>PAVING (ON-SITE)</b>				
12" Stabilized Sub-base	SY	16,704.00	2.50	41,760.00
8" Limerock	SY	13,824.00	9.00	124,416.00
1.5" Asphalt S-I	SY	13,824.00	8.75	120,960.00
Prime and Sand	SY	13,824.00	0.50	6,912.00
Type "F" Curb	LF	2,542.00	10.00	25,420.00
Miami Curb	LF	7,826.00	8.50	66,521.00
5' Sidewalk	LF	2,272.00	15.00	34,080.00
Standard Dead-End Barricade	EA	2	750.00	1,500.00
Concrete Driveway Aprons	EA	5	1,950.00	9,750.00
Saw Cut and Remove Existing Roadway	LS	1	1,200.00	1,200.00
Handicapped Ramps	EA	16	950.00	15,200.00
Signage and Striping	LS	1	9,250.00	9,250.00
<b>PAVING (ON-SITE) SUBTOTAL</b>				<b>456,969.00</b>

---

**CONSTRUCTION COST ESTIMATE FOR CYPRESS OAKS, PHASE 1**

8/12/2015

SITE WORK SUBTOTAL	727,118.55
SANITARY SEWER SUBTOTAL	233,402.72
STORM DRAINAGE SUBTOTAL	278,104.00
POTABLE WATER SUBTOTAL	198,882.00
RECLAIMED WATER SUBTOTAL	150,333.00
PAVING (ON-SITE) SUBTOTAL	456,969.00
<b>TOTAL</b>	<b>2,044,809.27</b>



**CONSTRUCTION COST ESTIMATE**  
**FOR**  
**CYPRESS OAKS, PHASE 1**  
**MAINTENANCE BOND**  
**&**  
**PERFORMANCE BOND**

8/12/2015

<i>Description</i>	<i>Total</i>	<i>Completed</i>	<i>Balance</i>
<b>SITE WORK</b>			
Mobilization	3,500.00	2,800.00	700.00
Survey - Construction Layout and As-Builts	17,500.00	12,250.00	5,250.00
Erosion Control / Dust Abatement / NPDES	5,000.00	4,000.00	1,000.00
Silt Fence	13,500.00	13,500.00	0.00
Clear and Grub	44,200.00	44,200.00	0.00
Earthwork (R/W, Ponds and Open Space)	113,015.25	101,713.73	11,301.53
Earthwork (Lots)	74,740.50	67,266.45	7,474.05
Final Grading (R/W, Ponds and Open Space)	37,775.00	33,997.50	3,777.50
Final Grading (Lots)	16,200.00	8,100.00	8,100.00
Saw-Cut and Remove Existing Trail Section	2,500.00	0.00	2,500.00
Seed and Mulch (Ponds and Flood Comp)	4,775.40	0.00	4,775.40
Seed and Mulch (Lots)	24,850.00	0.00	24,850.00
Sodding (R/W, Ponds, Open Space and Sewer)	60,603.20	0.00	60,603.20
Sodding (Lot Slopes)	6,979.20	0.00	6,979.20
Retaining Wall w/Safety Railing	75,200.00	67,680.00	7,520.00
Entrance Sign Walls w/Electrical & Lighting	50,755.00	0.00	50,755.00
Landscaping & Irrigation	131,885.00	0.00	131,885.00
6' PVC Fence	13,590.00	0.00	13,590.00
Testing	30,550.00	15,275.00	15,275.00
<b>SITE WORK SUBTOTAL</b>	<b>727,118.55</b>	<b>370,782.68</b>	<b>356,335.88</b>
<b>SANITARY SEWER</b>			
8" PVC Pipe 0-6' Cut (SDR35)	19,350.00	19,350.00	0.00
8" PVC Pipe 6'-8' Cut (SDR35)	17,077.50	17,077.50	0.00
10" PVC Pipe 0-6' Cut (SDR35)	40,622.75	40,622.75	0.00
10" PVC Pipe 6'-8' Cut (SDR35)	10,899.72	10,899.72	0.00
10" PVC Pipe 8'-10' Cut (SDR35)	3,048.57	3,048.57	0.00
10" PVC Pipe 10'-12' Cut (SDR35)	2,647.30	2,647.30	0.00
10" PVC Pipe 12'-14' Cut (SDR35)	2,114.25	2,114.25	0.00
10" PVC Pipe 8'-10' Cut (SDR26)	766.13	766.13	0.00
10" PVC Pipe 10'-12' Cut (SDR26)	3,986.50	3,986.50	0.00
10" PVC Pipe 12'-14' Cut (SDR26)	4,590.00	4,590.00	0.00
Standard Manhole 0-6' Cut	21,600.00	19,440.00	2,160.00
Standard Manhole 6'-8' Cut	28,050.00	25,245.00	2,805.00
Standard Manhole 8'-10' Cut	3,200.00	2,880.00	320.00
Standard Manhole 10'-12' Cut	9,750.00	8,775.00	975.00
Standard Manhole 12'-14' Cut	3,500.00	3,150.00	350.00
Standard Manhole 6'-8' Cut (fiberglass lined)	5,500.00	4,950.00	550.00
Single Service	8,100.00	8,100.00	0.00
Double Service	33,600.00	33,600.00	0.00
Testing	15,000.00	7,500.00	7,500.00
<b>SANITARY SEWER SUBTOTAL</b>	<b>233,402.72</b>	<b>218,742.72</b>	<b>14,660.00</b>



<b>STORM DRAINAGE</b>			
18" RCP	89,760.00	89,760.00	0.00
24" RCP	21,775.00	21,775.00	0.00
30" RCP	16,019.00	16,019.00	0.00
Type 5 Curb Inlet	109,500.00	82,125.00	27,375.00
Type 6 Curb Inlet	24,900.00	18,675.00	6,225.00
Standard Manhole 4' Dia. (FDOT-P)	4,200.00	3,780.00	420.00
Type "C" Inlet	5,250.00	5,250.00	0.00
18" M.E.S. w/Dissipator Pad	3,600.00	1,800.00	1,800.00
24" M.E.S. w/Dissipator Pad	1,000.00	500.00	500.00
30" M.E.S. w/Dissipator Pad	1,100.00	550.00	550.00
Plug 18" Pipe	1,000.00	1,000.00	0.00
<b>STORM DRAINAGE SUBTOTAL</b>	<b>278,104.00</b>	<b>241,234.00</b>	<b>36,870.00</b>
<b>POTABLE WATER SYSTEM</b>			
8" SDR-11 HDPE	3,200.00	0.00	3,200.00
8" PVC Pipe C-900 (DR-18)	18,345.00	14,676.00	3,669.00
6" PVC Pipe C-900 (DR-18)	44,737.00	44,737.00	0.00
8" Gate Valve w/Box	12,150.00	10,935.00	1,215.00
6" Gate Valve w/Box	17,600.00	15,840.00	1,760.00
2" Blow-Off Assembly	1,200.00	1,080.00	120.00
Single Service	5,000.00	4,500.00	500.00
Double Service	34,300.00	30,870.00	3,430.00
Fire Hydrant (w/Valve)	31,500.00	28,350.00	3,150.00
Temporary Jumper Assembly	1,250.00	1,250.00	0.00
8" RPZ Backflow Preventor	7,500.00	0.00	7,500.00
MJ Fittings	10,000.00	10,000.00	0.00
Restraints	3,600.00	3,600.00	0.00
10" Wet Tap and Valve	5,000.00	0.00	5,000.00
Testing and Bactys	3,500.00	0.00	3,500.00
<b>POTABLE WATER SUBTOTAL</b>	<b>198,882.00</b>	<b>165,838.00</b>	<b>33,044.00</b>
<b>RECLAIMED WATER SYSTEM</b>			
8" PVC Pipe C-900 (DR-18)	18,060.00	14,448.00	3,612.00
6" PVC Pipe C-900 (DR-18)	41,723.00	37,550.70	4,172.30
8" Gate Valve w/Box	12,150.00	10,935.00	1,215.00
6" Gate Valve w/Box	17,600.00	17,600.00	0.00
2" Blow Off Valve Assembly	1,200.00	1,080.00	120.00
Single Service	6,000.00	5,400.00	600.00
Double Service	33,600.00	30,240.00	3,360.00
MJ Fittings	18,500.00	18,500.00	0.00
Testing	1,500.00	0.00	1,500.00
<b>RECLAIMED WATER SUBTOTAL</b>	<b>150,333.00</b>	<b>135,753.70</b>	<b>14,579.30</b>
<b>PAVING (ON-SITE)</b>			
12" Stabilized Sub-base	41,760.00	41,760.00	0.00
8" Limerock	124,416.00	49,766.40	74,649.60
1.5" Asphalt S-I	120,960.00	0.00	120,960.00
Prime and Sand	6,912.00	2,764.80	4,147.20
Type "F" Curb	25,420.00	0.00	25,420.00
Miami Curb	66,521.00	66,521.00	0.00
5' Sidewalk	34,080.00	0.00	34,080.00
Standard Dead-End Barricade	1,500.00	0.00	1,500.00
Concrete Driveway Aprons	9,750.00	0.00	9,750.00
Saw Cut and Remove Existing Roadway	1,200.00	0.00	1,200.00
Handicapped Ramps	15,200.00	0.00	15,200.00
Signage and Striping	9,250.00	0.00	9,250.00
<b>PAVING (ON-SITE) SUBTOTAL</b>	<b>456,969.00</b>	<b>160,812.20</b>	<b>296,156.80</b>

**CONSTRUCTION COST ESTIMATE FOR CYPRESS OAKS, PHASE 1  
MAINTENANCE BOND & PERFORMANCE BOND**

8/12/2015

<i>Description</i>	<i>Total</i>	<i>Completed</i>	<i>Balance</i>
SITE WORK SUBTOTAL	727,118.55	370,782.68	356,335.88
SANITARY SEWER SUBTOTAL	233,402.72	218,742.72	14,660.00
STORM DRAINAGE SUBTOTAL	278,104.00	241,234.00	36,870.00
POTABLE WATER SUBTOTAL	198,882.00	165,838.00	33,044.00
RECLAIMED WATER SUBTOTAL	150,333.00	135,753.70	14,579.30
PAVING (ON-SITE) SUBTOTAL	456,969.00	160,812.20	296,156.80
<b>PHASE 1 TOTAL</b>	<b>2,044,809.27</b>	<b>1,293,163.30</b>	<b>751,645.98</b>

Total Estimated Construction Cost = \$2,044,809.27

Total Estimated Value of Work Completed = \$1,293,163.30

**Maintenance Bond Amount = \$1,293,163.30 x 0.20 (20%) = \$258,632.66**

Total Estimated Value of Work Not Completed = \$751,645.98

**Performance Bond Amount = \$751,645.98 x 1.10 (110%) = \$826,810.58**