CARBON OAK, INC.

THUNDER OAKS MINE, P-3976

ALABAMA SURFACE MINING COMMISSION

SURFACE MINING PERMIT APPLICATION

PART V

BONDING

Prepared by:

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V. BONDING

A. **Site Conditions**

1) Briefly describe the conditions within the increment which you are currently proposing to mine by answering the following:

(a) Average pre-mining slope 2.93%

(b) Percent sandstone 60.00%

(c) Final highwall slope (average) (if applicable) 4.00%

(d) Acres Prime Farmland 100%

(e) Acres Abandoned Land 0%

(f) Average pH of topsoil or topsoil substitute 6.00

Note: If pH range over the increment area is greater than one pH unit (unit 1 thru 14), give approximate number of acres which fall within each unit.

(g) Overburden acid-base account (expressed as tons of calcium carbonate per 1,000 tons material) N/A (only if total sulfur exceeds 0.5%).

B. **Estimate of Reclamation Cost (780.18)**

Give a detailed estimate of your cost of reclamation for the increment you are currently proposing to mine. Give individual cost estimate for grading, highwall elimination, topsoil (or topsoil substitute) replacement, revegetation and any other cost which may be applicable (prime farmland, hydrologic factors, etc.) **Show Calculations**

V. BONDING

ESTIMATED BOND TOTAL/INC. #1: $ $994,941.62

Company: Carbon Oak, Inc. License: L-0830 Acreage Fee (35/acre) $ 4,445.00

Permit # P-3976 Type Action: X New Permit

MINE: Thunder Oaks X New Increment Inc. #1

Expiration Date: _____ _____ Revision. Inc. # _____

Acres to be Bonded Bond # _____

127 Mining Acres Current Amount & (Acres) $ _____

0 Incidentals After Revision/Review $ _____

Comments:

Base Calculations for Mining Acres

Grading	127	Acres @ $1,500/acre	$ 190,500.00
Revegetation	127	Acres @ $800/acre	$ 101,600.00

Highwall Elimination

Drill & Shoot

Highwall Height (Ft) 99 (hw) (1/2)[(0.5)(hw)(1.5)(hw)](1/27)(hwl)(1.00/yd^3) $ 190,167

Highwall Length (Ft) 1397 (hwl)

Backfill

(1/2)[(hw)(3)(hw)](1/27)(hwl)1.50/yd^3 $ -

Adjustments

1.	Grading	127	Acres @ $250/acre	$	31,750.00
2.	Topsoil Replacement	127	Acres @ $500/acre	$	63,500.00
3.	Topsoil Substitute	0	Acres @ $200/acre	$	-
4.	Post-mine Forest/Range	127	Acres @ $150/acre	$	19,050.00
5.	Steep Slope' Mining	0	Acres @ $100/acre	$	-
6.	Steeper than 4:1 Post-mining slope	0	Acres @ $100/acre	$	-
7.	Greater than 50% Sandstone	127	Acres @ $300/acre	$	38,100.00
8.	Prime Farmland	127	Acres @ $1,500/acre	$	190,500.00
9.	Adverse PHC		Site Specific	$	-
10.	Tuscaloosa Formation	0	Acres @ $300/acre	$	-

Incidentals

1.	Haul Roads	0	Acres @ $1,000/acre	$	-
2.	Temporary Ponds, Diversions	2	Structures @ $20,000/Struct.	$	40,000.00
3.	Permanent Impoundments	0	Structures @ $10,000/Struct.	$	-
4.	Permanent Roads	0	Acres @ $400/acre	$	-
5.	Coal Stockpiles, Washer & Refuse Disposal Areas	0	Acres @ $2,000/acre	$	-
6.	Topsoil Stockpiles	0	Acres @ $800/acre	$	-

7. Removal of Structures

	Washer/Crusher	$	-
	Buildings	$	-
	Equipment	$	-
	Other (List)	$	-

TOTAL INCIDENTAL BOND $ 40,000.00

Summary of Costs by Category

Mining Area	Base Grading		$	190,500.00
	Base Revegetation		$	101,600.00
Adjustments	1.	Grading	$	31,750.00
	2.	Topsoil Replacement	$	63,500.00
	3.	Topsoil Substitute	$	0.00
	4.	Forest/Range Land Use	$	19,050.00
	5.	Steep Slope' Mining	$	0.00
	6.	Post-mining Slope	$	0.00
	7.	% Sandstone	$	38,100.00
	8.	Prime Farmland	$	190,500.00
	9.	Adverse PHC	$	0.00
	10.	Tuscaloosa Formation	$	0.00
Highwall Elimination			$	190,166.63
Incidentals			$	40,000.00
		Subtotal	$	865,166.63
	15% Contractor Profit & Overhead		$	129,774.99
		TOTAL	$	**994,941.62**

Conditions to Permit which affect Bond Amount

1.
2.
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4.

CARBON OAK, INC.
THUNDER OAKS MINE, P-3976

ESTIMATED BOND TOTAL/INC. #6: $ $55,947.50

Company: Carbon Oak, Inc. License: L-0830 Acreage Fee (35/acre) $ 315.00

Permit # P-3976 Type Action: X New Permit

MINE: Thunder Oaks X New Increment Inc. #6

Expiration Date: _____ _____ Revision. Inc. # _____

Acres to be Bonded Bond # _____

0 Mining Acres Current Amount & (Acres) $ _____

9 Incidentals After Revision/Review $ _____

Comments:

Base Calculations for Mining Acres

Grading	9	Acres @ $1,500/acre	$ 13,500.00
Revegetation	9	Acres @ $800/acre	$ 7,200.00

Highwall Elimination

Drill & Shoot

Highwall Height (Ft) 0 (hw) (1/2)[(0.5)(hw)(1.5)(hw)](1/27)(hwl)(1.00/yd^3) $ -

Highwall Length (Ft) 0 (hwl)

Backfill

(1/2)[(hw)(3)(hw)](1/27)(hwl)1.50/yd^3 $ -

Adjustments

1.	Grading	9	Acres @ $250/acre	$	2,250.00
2.	Topsoil Replacement	9	Acres @ $500/acre	$	4,500.00
3.	Topsoil Substitute	0	Acres @ $200/acre	$	-
4.	Post-mine Forest	0	Acres @ $150/acre	$	-
5.	Steep Slope' Mining	0	Acres @ $100/acre	$	-
6.	Steeper than 4:1 Post-mining slope	0	Acres @ $100/acre	$	-
7.	Greater than 50% Sandstone	9	Acres @ $300/acre	$	2,700.00
8.	Prime Farmland	9	Acres @ $1,500/acre	$	13,500.00
9.	Adverse PHC		Site Specific	$	-
10.	Tuscaloosa Formation	0	Acres @ $300/acre	$	-

Incidentals

1.	Haul Roads	1	Acres @ $1,000/acre	$	1,000.00
2.	Temporary Ponds, Diversions	0	Structures @ $20,000/Struct.	$	-
3.	Permanent Impoundments	0	Structures @ $10,000/Struct.	$	-
4.	Permanent Roads	0	Acres @ $400/acre	$	-
5.	Coal Stockpiles, Washer & Refuse Disposal Areas	2	Acres @ $2,000/acre	$	4,000.00
6.	Topsoil Stockpiles	0	Acres @ $800/acre	$	-
7.	Removal of Structures				

	Washer/Crusher	$	-
	Buildings	$	-
	Equipment	$	-
	Other (List)	$	-

TOTAL INCIDENTAL BOND $ 5,000.00

Summary of Costs by Category

Mining Area	Base Grading		$	13,500.00
	Base Revegetation		$	7,200.00
Adjustments	1.	Grading	$	2,250.00
	2.	Topsoil Replacement	$	4,500.00
	3.	Topsoil Substitute	$	0.00
	4.	Forest/Range Land Use	$	0.00
	5.	Steep Slope' Mining	$	0.00
	6.	Post-mining Slope	$	0.00
	7.	% Sandstone	$	2,700.00
	8.	Prime Farmland	$	13,500.00
	9.	Adverse PHC	$	0.00
	10.	Tuscaloosa Formation	$	0.00
Highwall Elimination			$	0.00
Incidentals			$	5,000.00
		Subtotal	$	48,650.00
	15% Contractor Profit & Overhead		$	7,297.50
		TOTAL	$	**55,947.50**

Conditions to Permit which affect Bond Amount

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