

H. LOWRY TRIBBLE, JR., P.E.  
WILLIAM F. HODGES, P.E.  
W. MICHAEL STUBBS, P.E.  
R. BRANT LANE, P.E.  
CLINT L. COURSON, CHMM  
K. MATTHEW CHEEK, P.E.  
DANIEL E. CHEEK, P.E.



HODGES, HARBIN,  
NEWBERRY & TRIBBLE, INC.

*Consulting Engineers*

NATHAN D. DUNN, P.E.  
KEVIN G. BERRY, P.E.  
RYAN S. WILLOUGHBY, P.E.  
WILLIAM A. GRANICH, P.E.

August 29, 2013

Compliance Officer – Solid Waste Section  
North Carolina Dept. of Environment & Natural Resources  
217 W. Jones Street  
Raleigh, NC 27603

**Re: Lake Norman C & D Landfill  
Lincoln County, North Carolina  
Facility Permit No. 55-04  
Closure / Post-Closure Cost  
HHNT Project No. 6703-457-05**

Dear Ms. Rice:

I have enclosed the updated Closure/Post-Closure Cost Estimate for Financial Assurance on the subject project. Please note, these unit prices were updated and are now in 2013 dollars, so no inflation factor is being applied. These costs are summarized below:

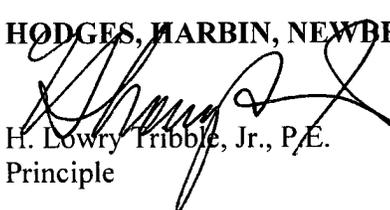
Closure Costs.....	\$555,484.00
Post-Closure Costs.....	\$561,750.00
Potential Assessment and Corrective Action.....	<u>\$2,000,000.00</u>
Total Financial Assurance .....	\$3,117,234.00

The annual financial assurance mechanism will be submitted under separate cover.

Should you have any questions, please call.

Sincerely,

**HODGES, HARBIN, NEWBERRY & TRIBBLE, INC.**

  
H. Lowry Tribble, Jr., P.E.  
Principle

HLTjr/ml

*Enclosure*

cc: Edward F. Mussler, III, P.E. (w/ enclosure)  
Larry Frost (w/ enclosure)  
Jeffrey Geiss (w/ enclosure)

Mike Gurley (w/ enclosure)  
Bart Keller (w/ enclosure)

**LAKE NORMAN C & D LANDFILL  
LINCOLN COUNTY, NORTH CAROLINA  
CLOSURE CARE COST ESTIMATE**

**AUGUST 2013**

**GENERAL**

Largest Area: Cells No. 1A, 1B, 2A, 2B = 923,472 s.f. = 21.2 acres

**CLOSURE CARE COST ESTIMATE**

1	6" Topsoil																
		923,472	s.f.	x	0.5	ft.	÷	27	ft <sup>3</sup> /cy	=	17,101	c.y.	@	\$2.70	=	\$46,172.70	
		(soil cost \$0.50/ c.y. - Haul Cost \$1.90 / c.y. - Placement Cost \$0.30 / c.y.)															
2	18" Cover Soil																
		923,472	s.f.	x	1.5	ft.	÷	27	ft <sup>3</sup> /cy	=	51,304	c.y.	@	\$2.70	=	\$138,520.80	
		(soil cost \$0.50 / c.y. - Haul Cost \$1.90 / c.y. - Placement Cost \$0.30 / c.y.)															
3	Seed																
					70	#/ac	x	21	ac	=	1,470	#	@	\$5.15	=	\$7,570.50	
4	Fertilizer																
					0.75	tons/ac	x	21	ac	=	16	tons	@	\$375.00	=	\$6,000.00	
5	Lime																
					1	ton/ac	x	21	ac	=	21	tons	@	\$80.00	=	\$1,680.00	
6	Mulch																
											21	ac	@	\$250.00	=	\$5,250.00	
7	Labor for Seeding, Fertilizing, Liming & Mulching																
											21	ac	@	\$375.00	=	\$7,875.00	
8	Silt Fence																
											750	l.f.	@	\$3.10	=	\$2,325.00	
9	Final Disposal of Waste & Cleanup																
											250	tons	@	\$42.00	=	\$10,500.00	
10	Downdrain Pipe Construction																
											2,400	l.f.	@	\$15.50	=	\$37,200.00	
11	Ditch Lining																
											4,784	s.y.	@	\$5.00	=	\$23,920.00	
12	Diversion Berms																
											17,420	l.f.	@	\$11.00	=	\$191,620.00	
13	Sediment Basin Cleanout																
											1,500	c.y.	@	\$3.50	=	\$5,250.00	
14	Waste Limit Survey																
											1	L.S.	@	\$4,500.00	=	\$4,500.00	
15	Engineering and Closure Certification																
											21	ac	@	\$3,100.00	=	\$65,100.00	
16	Additional Sediment & Erosion Control Construction																
											1	L.S.	@	\$2,000.00	=	\$2,000.00	
											<b>TOTAL CLOSURE COST (2013)</b>					<b>\$555,484.00</b>	

**LAKE NORMAN C & D LANDFILL  
LINCOLN COUNTY, NORTH CAROLINA  
POST CLOSURE CARE COST ESTIMATE**

**AUGUST 2013**

1	Sediment & Erosion Control, Including Inspections, Repairs to Cap, Slope & Vegetation	1	L.S.	@	\$5,000.00	=	\$5,000.00
2	Sediment Basin Cleanout	750	C.Y.	@	\$6.30	=	\$4,725.00
3	Access, Security, Signs	1	L.S.	@	\$1,000.00	=	\$1,000.00
4	Engineering Inspections	4	yr	@	\$2,000.00	=	\$8,000.00
							\$18,725.00
							\$561,750.00
							\$561,750.00

ANNUAL POST CLOSURE CARE COST (2013)

**X 30 YEARS**

**TOTAL 30 YEAR COST (2013)**

**\$561,750.00**