

## **Charlotte County Excavation Application Group II & III Submittal Requirements & Application Processes**

### **Submittal Requirements**

Submit one (1) copy of the tabbed binder (see Application section below); three (3) copies of the Excavation and Reclamation Plans - if these are larger than 11" x 17" then include an additional copy sized 11" x 17"; and one (1) electronic disc that includes all submitted information.

Include payment in the form of a check made out to **CCBCC**:

- **\$4,800 for Group II**
- **\$9,600 for Group III**
- **an Amendment is a \$500 flat rate**

DO NOT obtain a payment receipt. If the application is deemed incomplete after the five (5) day review period, the check and the Application will be returned to you. If deemed complete, staff will deposit the check with the County. A receipt will be placed in the main file and you may request a copy at any time.

### **Application**

The Application includes the application form and all other information required by the Sufficiency Checklist. Please submit the information required for the Application in a tabbed binder, except for the Excavation and Reclamation Plans which may be attached separately. Please place the items in the binder in the order they are presented in the Sufficiency Checklist. The Sufficiency Checklist indicates the appropriate tab numbers in the far left column. Number all pages in logical, sequential order. Indicate the page number on the Sufficiency Checklist.

*For the Plans:*

- The Reclamation Plan(s) may be included as a page or pages within the Excavation Plans;
- Each page of the Plan(s) must contain a north arrow, date, an appropriately sized scale, and be signed and sealed by a professional engineer;
- Include the words "Hours of operation are from 7 a.m. to 6 p.m. Mon-Fri; 7 a.m. to Noon on Saturday" on the Excavation Plans.

### **Permitting Processes**

*PLEASE NOTE: If you are applying for a Preliminary, Preliminary & Final, or an Amendment to a permitted Group III excavation, as of September 9, 2008 the property must have a Future Land Use Map designation of Mineral Resource Extraction and a zoning designation of Excavation and Mining. Do not submit an excavation application until these are obtained.*

### **Preliminary Application Process:**

Applicant submits an Application to the Growth Management Department, Room 205, Building B, Murdock Administration Center. Staff shall review the Application for completeness. If the Application is not complete, the Application shall be returned to the applicant.

If deemed complete, the Application shall be forwarded to other County departments for review. These departments shall check to determine if the Application meets the requirements of the preliminary application process. If the County deems the Application to be insufficient, the Excavation Administrator shall provide the applicant with a written notice of the insufficiencies as soon as

practicable. It is the County's option to cease review of the Application until all insufficiencies are addressed. It is the applicant's option to supply the additional information or request and receive a preliminary hearing on the Application without addressing the insufficiencies.

Once the applicant has submitted all the information needed to address the insufficiencies, the County departments shall complete their review within 15 working days of receiving the information. County staff shall send the Excavation Administrator a report containing comments and recommendations. The Excavation Administrator shall then supply the applicant with a master report within 15 working days of receiving staff comments and recommendations.

Upon the applicant's receipt of the Excavation Administrator's master report concluding that the excavation does or does not meet the requirements of the application process, the applicant may choose to provide additional information to the Excavation Administrator or proceed to the hearing. The Excavation Administrator will not schedule a hearing until it is determined that the application process requirements have been met or the applicant provides a written request for a hearing.

#### Final Application Process:

Applicant submits a new application form (updated as necessary), sufficiency checklist, and any additional supplemental materials. The Excavation Administrator shall check to see that the additional materials satisfy the conditions of preliminary approval.

If the Excavation Administrator or other County departments deem anything within the total Application information to be insufficient, the Excavation Administrator shall provide the applicant with a written notice of the insufficiencies as soon as practicable. It is the County's option to cease review of the application until all insufficiencies are addressed. It is the applicant's option to supply the additional information or request and receive a Final Hearing on the application as presented.

Once the applicant has submitted all the information needed for the Final Approval Process, County staff shall complete their review. County staff shall send the Excavation Administrator a report containing comments and recommendations within 15 working days of having received all of the information needed. The Excavation Administrator shall then supply the applicant with a master report within 15 working days of receiving the department reports.

Upon the Excavation Administrator's determination that the excavation does meet the requirements of the Final Application Process, the Excavation Administrator shall schedule a Final Hearing. If the Excavation Administrator determines the application does not meet the requirements of the Final Application Process, the applicant may choose to provide additional information to the Excavation Administrator or proceed to the hearing. A Final Hearing will not be scheduled until the Excavation Administrator determines that the Final Application Process requirements have been met or the applicant provides a written request for Final Hearing.

If the application is not approved within two years of the date that it was first submitted, the application shall be null and void, unless an extension is granted.

<b>Office Use Only</b>	
Excavation File # _____	Date Submitted _____
	Date Deemed Complete _____

## Charlotte County Excavation Application Group II & III

### SUFFICIENCY CHECK LIST

Tab #	Item	Included ? (check)	Page #	*If not included, why not?	Office Use Only
<b>Place in front of 1<sup>st</sup> tab</b>	<b>Complete application form</b>				
	<b>Sufficiency Check List</b>				
	<b>Check</b>				
<b>1</b>	<b>Affidavits (Forms A, B, and C as applicable)</b>				
<b>2</b>	<b>Deed or other Proof of Ownership</b>				
<b>3</b>	<b>Location Map</b>				
<b>4</b>	<b>Project Narrative</b> , including but not limited to:				
	Description of all activity that will take place on-site <ul style="list-style-type: none"> <li>• If submitting for Final, respond to Preliminary approval conditions, and include other information as appropriate</li> <li>• If submitting an Amendment explain the changes to the approved permit in detail</li> </ul>				
	Type of ownership				
	Proposed legal measures to provide for perpetual maintenance of the excavation including any common or dedicated open space, improvements, easements, dedications and reservations				
	Variance request(s)				
	DRI Development Order compliance statement				
<b>5</b>	<b>Excavation Narrative</b> , include any information that supplements drawn excavation plans, such as:				
	Excavation schedule				
	If within ½ mile of residential structures, discuss the effects that the excavation could have on the health, safety and welfare of those residents (Quality of Life)				

Tab #	Item	Included ? (check)	Page #	*If not included, why not?	Office Use Only
	Dust control and suppression methods				
	Erosion control methods				
	Proposed method of dewatering and use of settling ponds, to supplement drawn plans				
	Haul route location and method of mitigating impacts (if necessary)				
	Provide a description as to how the mine perimeter will be secured (i.e. berms, fencing, etc).				
	Other items, please list				
6	<b>Reclamation Narrative</b> - reclamation schedule and plan narrative to supplement drawn plans				
	Littoral Area Calculation Worksheet or own document with same information				
7	<b>Environmental surveys</b>				
	Listed Species Survey (no older than one year)				
	FLUCCS Map (Level 4, at a scale of 1 inch equals 200 feet, or as otherwise indicated by Excavation Administrator)				
8	<b>Environmental Impact Statement</b> Include qualifications, calculations, assumptions, survey methodologies and other technical components in the narrative				
	Narrative, and graphics, discussing the direct and indirect impacts of the excavation on:				
	•vegetation,				
	•wildlife,				
	•wildlife habitat,				
	•endangered or threatened species,				
	• air quality, and				
	•surface and groundwater quality				
	Describe any projected contaminants, hazardous materials, tailings or other by-products, including naturally occurring elements				
	Discuss cumulative impacts that the excavation may have on				
	• surface water resources,				

Tab #	Item	Included ? (check)	Page #	*If not included, why not?	Office Use Only
	<ul style="list-style-type: none"> <li>• ground water resources,</li> <li>• vegetation and wildlife, and</li> <li>• air quality</li> </ul>				
	List each person preparing the statement, their qualifications, and which portion(s) of the narrative they were involved in				
9	<b>Legal description and boundary survey of the project site (including total acreage) - stamped, sealed &amp; signed</b>				
10	<b>Traffic Impact Analysis &amp; proof of meeting with County Engineer</b> if proposing to haul 10,000 or more cubic yards off-site				
11	<b>Haul Route Narrative</b> , to include:				
	Current condition of roads i.e. paved, width etc.				
	Description of trucks to be used; weight of trucks, number of axles, anticipated payloads of trucks				
	Description of adverse impacts haul route could have, i.e. noise, dust, etc. and proposed mitigation and traffic safety measures				
12	<b>Soil Boring Report</b> if excavation will be greater than 12 feet in depth 1 boring per 10 acres, with a minimum of two per excavation application				
13	<b>Copies of local, state, and federal permits or exemption letter</b>				
	County Tree Permit				
	County Stormwater Management Plan Permit				
	County Right of Way (ROW) permit				
	SWFWMD or SFWMD Environmental Resource Permit (ERP)				
	Water Use Permit				
	FDEP permit approval				
	ACOE permit approval				
	Fish and Wildlife Agency (FWC&FWS) comments				
	FDOT permit approval of Turn lanes/Deceleration lanes				
14	<b>Rock Crushing Plan</b> Detail location, noise control, etc.				

<b>15</b>	<b>Blasting Plan</b>				
	Describe the type of blasting, to what extent (location, days, hours, and times of blasting), noise levels & impact on surrounding area				
	Fire Marshall Blasting Permit				
<b>16</b>	<b>Reclamation Bond</b>				
<b>17</b>	<b>Other items, such as draft Access Easements, Charlotte Harbor CRA approval letter, etc., list these items below:</b>				

**Excavation Plans & Reclamation Plans shall be submitted with all applications**

*These plans are attached separately to the tabbed binder, therefore no tab numbers are needed*

Excavation Plans, shall include the following at a minimum:	Included ? (check)	Page #	*If not included, why not?	Office Use Only
Ownership and boundary lines, including bearings and distances superimposed over an Aerial Photo – the map shall clearly indicate any parcels within the project site that are not owned by the Applicant/owner (access shall be provided to these sites in the form of an access easement)				
Size, shape, depth and location of the proposed excavation, including recharge trenches and settling ponds				
Proposed haul routes, including alternative route; location of asphalt aprons; clear line of site distances at all intersections (entrance to mine); inspection area for law enforcement personnel & FDOT; signage; etc				
Right-of-way and easement lines				
Distance of excavation from right-of-way lines, easement lines, property lines, and residential structures within and adjacent to the site				
Existing natural and manmade features within the site and within 150 feet of the perimeter of the excavation - if blasting, this shall be expanded to ½ mile				
Location and preservation plan for all proximate wetland areas to be preserved, including showing the 25 foot buffer.				
Topographic survey showing existing and proposed grades related to NGVD				
Proposed slopes: include a cross-sectional drawing referring to NGVD showing the proposed depth of excavation, slope of the side and depth of water				
Location of soil borings				
Points of access to the excavation				
Proposed method of de-watering and use of settling ponds				
All potable water wells or lakes within a five hundred foot radius of excavation perimeter				
Location of known wellfields and wellfield protection zones within a 5 mile radius				
Locations of all proposed spoil piles and stockpiles of excavated materials				
Location of all staff gauges required on-site				
Location of scale house				
Location of rock crushing				

Reclamation Plan(s), shall include the following at a minimum	Included ? (check)	Page #	*If not included, why not?	Office Use Only
Show all areas to be reclaimed by depicting what manmade and natural features will exist when reclamation plan is complete, include depiction of mitigation or preservation area for wildlife species				
Depict two typical cross sections, with elevations oriented north to south and east to west, showing areas to be filled, back-filled, reconstructed or reshaped - water elevations shall also be shown				
Techniques to be used to vegetate littoral zone, if littoral zones are to be included				
Show any area to become a lake				
Show the lineal feet of the lake edge(s) and illustrate the littoral zone				
Depict any required fences, walls, vegetative buffers - include at least one cross-section				
Document the type and location of vegetation to be preserved or planted, document methods necessary to control erosion				
Indicate that all spoil piles and stockpiles of material shall be removed from the site or incorporated into the reclamation plan when the excavation is complete.				

\*N/A = Not available

\*N/R = Not required

\*other explanation as appropriate

Reviewer's Name: \_\_\_\_\_ Date: \_\_\_\_\_



## Charlotte County Excavation Application Group II & III

### Office Use Only

Date Received: \_\_\_\_\_ Excavation File #: \_\_\_\_\_  
Date Deemed Complete: \_\_\_\_\_  
Review Fee Amount: \_\_\_\_\_ Review Fee Receipt #: \_\_\_\_\_

**Please check the item that you are applying for:**

#### If Group II:

- \_\_\_\_\_ Preliminary
- \_\_\_\_\_ Final
- \_\_\_\_\_ Preliminary & Final
- \_\_\_\_\_ \*Non-administrative Permit Amendment

#### If Group III:

- \_\_\_\_\_ Preliminary
- \_\_\_\_\_ Final
- \_\_\_\_\_ Preliminary & Final
- \_\_\_\_\_ \*Non-administrative Permit Amendment

\*A non-administrative permit amendment means a permit amendment that changes a specific permit condition. Specific permit conditions are provisions that govern operating days and times, permit duration, quantity of material to be excavated, maximum depth of excavation, blasting and rock crushing restrictions, and any additional stipulations imposed by the excavation administrator and hearing examiner

---

---

**Project Name:** \_\_\_\_\_

(Any previous names used): \_\_\_\_\_

**Project Address** (if unknown, contact Land Information Division, 764-4125, for addressing information):

\_\_\_\_\_

**Project Tax ID #** (provide all Tax ID#'s of property): \_\_\_\_\_

\_\_\_\_\_

**1. Name of Applicant** \_\_\_\_\_

Home/Office Phone ( ) \_\_\_\_\_ Cell Phone ( ) \_\_\_\_\_

Fax # \_\_\_\_\_ e-mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ St \_\_\_\_\_ Zip \_\_\_\_\_

**2. Name of Local Agent** \_\_\_\_\_

Home/Office Phone ( ) \_\_\_\_\_ Cell Phone ( ) \_\_\_\_\_

Fax # \_\_\_\_\_ e-mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ St \_\_\_\_\_ Zip \_\_\_\_\_

**3. Owner(s) of Record** \_\_\_\_\_

Home/Office Phone ( ) \_\_\_\_\_ Cell Phone ( ) \_\_\_\_\_

Fax # \_\_\_\_\_ e-mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ St \_\_\_\_\_ Zip \_\_\_\_\_

**4. Land Surveyor** \_\_\_\_\_

Home/Office Phone ( ) \_\_\_\_\_ Cell Phone ( ) \_\_\_\_\_

Fax # \_\_\_\_\_ e-mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ St \_\_\_\_\_ Zip \_\_\_\_\_

**5. Engineer** \_\_\_\_\_

Home/Office Phone ( ) \_\_\_\_\_ Cell Phone ( ) \_\_\_\_\_

Fax # \_\_\_\_\_ e-mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ St \_\_\_\_\_ Zip \_\_\_\_\_

**6. Attorney** \_\_\_\_\_

Home/Office Phone ( ) \_\_\_\_\_ Cell Phone ( ) \_\_\_\_\_

Fax # \_\_\_\_\_ e-mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ St \_\_\_\_\_ Zip \_\_\_\_\_

**7. Contractor/Operator** \_\_\_\_\_

Home/Office Phone ( ) \_\_\_\_\_ Cell Phone ( ) \_\_\_\_\_

Fax # \_\_\_\_\_ e-mail \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ St \_\_\_\_\_ Zip \_\_\_\_\_

**PROPERTY INFORMATION:**

8. Legal Description: Lot\_\_\_\_\_, Block\_\_\_\_\_, Subdivision\_\_\_\_\_ Section/Unit\_\_\_\_\_ or Parcel\_\_\_\_\_, Section\_\_\_\_\_ Twp.\_\_\_\_\_ Rge.\_\_\_\_\_
9. Property Size \_\_\_\_\_ (acres)
10. Zoning District designation:\_\_\_\_\_
11. Future Land Use Map designation:\_\_\_\_\_
12. Existing Land Use:\_\_\_\_\_
13. a. Has this property received any variance, special exception, plan amendment, rezoning or other County approvals?  
Yes\_\_\_ No\_\_\_  
If yes, please specify the type, petition number and date of such approval\_\_\_\_\_
- b. Are there any variance, special exception, plan amendment, rezoning or other County approval requests filed and/or pending decision?  
Yes\_\_\_ No\_\_\_  
If yes, specify the type, petition number and anticipated date approval\_\_\_\_\_
14. Is the property located within a Development of Regional Impact (DRI)? Yes\_\_\_ No\_\_\_  
If yes, name the DRI,\_\_\_\_\_, and include in the **Project Narrative** a description of how the excavation will comply with conditions of the DRI Development Order.
15. Is the property located within the Charlotte Harbor Community Redevelopment Area (CRA)?  
Yes\_\_\_ No\_\_\_  
If yes, include the Decision Letter from the CRA Advisory Committee under Tab 18.
16. Are there any known archaeological or historical sites to be found on this property?  
Yes\_\_\_ No\_\_\_
- 
- 

**PROJECT INFORMATION:**

17. **In a Project Narrative**, describe the project in sufficient detail to provide an understanding of the nature of the development proposal.
18. a. Has this property ever undergone previous Excavation review? Yes\_\_\_ No\_\_\_  
If yes, indicate the Excavation file number\_\_\_\_\_

- b. Was the previous project approved? Yes \_\_\_ No \_\_\_  
If yes, was it given Final or Preliminary approval? \_\_\_\_\_
- i. If submitting for Final at this time, provide a statement in the **Project Narrative** responding to any stipulated conditions of the approval.  
(a) This request is for all \_\_\_\_\_, or part \_\_\_\_\_, of the area that received Preliminary approval. If part, explain why in the **Project Narrative**.
- ii. If submitting for an Amendment, explain in the **Project Narrative** the changes from what was previously approved.

19. Is any variance from the excavation ordinance requirements anticipated?  
Yes \_\_\_ No \_\_\_  
If yes, include the request in the **Project Narrative**.

20. Is the development site to be subdivided? Yes \_\_\_ No \_\_\_  
\_\_\_\_\_ Not at this time, but possibly in the future

21. List any State or Federal permits required for the proposed development.

\_\_\_\_\_

\_\_\_\_\_

22. Provide the following information relative to the specific development:

a. Type of material to be excavated

\_\_\_\_\_

b. Surface Area of the excavation \_\_\_\_\_ (acres)

c. Volume of material to be removed \_\_\_\_\_ (C.Y.)

d. Amount of material to be hauled off-site \_\_\_\_\_ (C.Y.)

e. Amount expected to be hauled off-site per year \_\_\_\_\_ (C.Y.)

f. Set-backs from top of bank to the following (Facing the project at the right-of-way):

1. Right-of-way (i.e. front of property) \_\_\_\_\_ (FT)

2. Right side property line \_\_\_\_\_ (FT)

3. Left side property line \_\_\_\_\_ (FT)

4. Rear property line \_\_\_\_\_ (FT)

5. Distance of nearest potable well \_\_\_\_\_ (FT)

g. Maximum depth requested \_\_\_\_\_ (FT)

h. Are you requesting Rock Crushing \_\_\_ Yes \_\_\_ No

i. Are you requesting Blasting \_\_\_ Yes \_\_\_ No

If yes, have you obtained a Blasting Permit from State Fire Marshall? \_\_\_\_\_  
Provide Permit Number and date of issuance \_\_\_\_\_  
Submit a detailed plan showing location, hours of blasting, and type of blasting, including noise levels.

j. Distance to nearest residence \_\_\_\_\_

k. Distance to nearest commercial structure \_\_\_\_\_

23. Type of fencing that will be utilized around the perimeter of the site \_\_\_\_\_

24. Excavation duration \_\_\_ years and \_\_\_ months  
Maximum duration: Group II = 3yrs., Group III = 10 yrs.

25. Dewatering:

a. Pumping Rate \_\_\_\_\_ (GPM)

b. Minimum ground water table elevation during the process \_\_\_\_\_ (FT-NGVD)

c. I have attached a diagram illustrating limits of Cone of Depression (if including, list under Excavation Narrative, Tab #5, under Other items) Yes\_\_\_ No\_\_\_

26. If the project is located within a flood hazard zone as established by FEMA, provide elevations \_\_\_\_\_

27. Has initial contact been made with the Southwest Florida Water Management District or South Florida Water Management District with regard to storm water discharge permits?  
Yes\_\_\_ No\_\_\_

28. Will a permit from the Florida Department of Transportation be required? Yes\_\_\_ No\_\_\_  
If yes, has the Applicant made contact with FDOT? Yes\_\_\_ No\_\_\_

29. Are scales being installed and truckloads counted for Annual Report and payment of fees?  
(Please note that the scale house needs a building permit)  
\_\_\_ Yes \_\_\_ No

---

---

**ENVIRONMENTAL INFORMATION:**

30. Have you submitted a tree removal/preservation site plan with your tree permit to the County's Environmental Specialist? Yes\_\_\_ No\_\_\_

31. Do any natural or man-made bodies of water exist on the property? Yes\_\_\_ No\_\_\_  
Are any of them tidal? Yes\_\_\_ No\_\_\_

32. Will the resultant water be fresh, brackish, or salt? \_\_\_\_\_  
If fresh, has Applicant provided for the control of aquatic weeds? Yes\_\_\_ No\_\_\_  
Explain: \_\_\_\_\_

---

<b>Office Use Only</b> Excavation File # _____ Date _____
--

### FORM A. PROPERTY OWNER AUTHORIZATION TO APPLICANT

I, the undersigned, being first duly sworn, depose and say that I am the owner of the property described and which is the subject matter of the proposed hearing.

I give authorization for \_\_\_\_\_ to be the Applicant for this excavation application. I understand that as owner of the property, I am ultimately responsible for all activity on the site and am responsible for the proper reclamation of the site at the end of the excavation activity.

STATE OF FLORIDA, COUNTY OF CHARLOTTE

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by \_\_\_\_\_ who is personally known to me or has/have produced \_\_\_\_\_ as identification and who did/did not take an oath.

Notary Public Signature	Signature of Owner
Notary Printed Signature	Printed Signature of Owner
Title	Address
Commission Code	City, State, Zip
	Telephone Number

**Office Use Only**  
Excavation File # \_\_\_\_\_

**FORM B. APPLICANT AUTHORIZATION TO AGENT**

I, the undersigned, being first duly sworn, depose and say that I am the Applicant for this proposed excavation of the property described and which is the subject matter of the proposed hearing.  
I give authorization for \_\_\_\_\_ to be my agent for this application.

STATE OF FLORIDA, COUNTY OF CHARLOTTE

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_,

20\_\_\_\_\_, by \_\_\_\_\_ who is personally known to me or has/have produced \_\_\_\_\_ as identification and who did/did not take an oath.

_____ Notary Public Signature	_____ Signature of Applicant
_____ Notary Printed Signature	_____ Printed Signature of Applicant
_____ Title	_____ Address
_____ Commission Code	_____ City, State, Zip
	_____ Telephone Number

**Office Use Only**

Excavation File # \_\_\_\_\_

**FORM C. AGENT/OWNER SWORN STATEMENT**

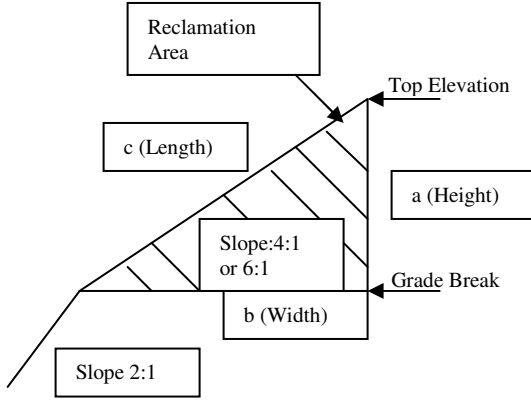
I, the undersigned, being first duly sworn, depose and say that I am the owner or agent of the property described and which is the subject matter of the proposed hearing; that all answers to the questions in this application, and all sketches, data and other supplementary matter attached to and made a part of the application are honest and true to the best of my knowledge and belief. I understand this application must be complete and accurate before the review can be scheduled, and that if I am not the owner of the property I have attached a notarized authorization from the owner(s) to submit this application. I further agree to comply with all stipulations and conditions that might be required by Charlotte County for approval of the site plan should it be approved for development.

STATE OF FLORIDA, COUNTY OF CHARLOTTE

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by \_\_\_\_\_ who is personally known to me or has/have produced \_\_\_\_\_ as identification and who did/did not take an oath.

_____ Notary Public Signature	_____ Signature of Applicant or Agent
_____ Notary Printed Signature	_____ Printed Signature of Applicant or Agent
_____ Title	_____ Address
_____ Commission Code	_____ City, State, Zip
	_____ Telephone Number

**LITTORAL AREA CALCULATION WORKSHEET**



Top Elevation - Grade Break = a (Height)

a (Height) x Slope (If the slope is 4:1, use 4) = b (Width)

Use the equation:  $a^2 + b^2 = c^2$   
 $c \text{ (Length)} = \sqrt{a^2 + b^2}$

$(c \times \text{lineal feet of lake perimeter}^*) \div 43,560 \text{ (square feet)}$   
 $\times \$3,000 = \text{Bond Amount}$

\*The lineal feet of lake perimeter is measured from the top of the bank.

Total lineal feet of lake perimeter \_\_\_\_\_ ft.

Total width of littoral area \_\_\_\_\_ ft.

Lineal Ft. x Width = \_\_\_\_\_ ft.

Divide by 43,560 ft. = \_\_\_\_\_ acres of Littoral Area.

Littoral Acres x \$3,000. per acre = \$\_\_\_\_\_ (total bond amount for reclamation).

If more than one lake is involved in this application, provide a chart with the above information for each lake showing each lake individually.