

BURDETTE LAND CONSULTING, INC.

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LETTER OF TRANSMITTAL

To: Mr. Monte Matthews Date: August 17, 2007

US Army Corps of Engineers Project #: 60053

6508 Falls of Neuse Rd. Ste 120 RE: Pennington South S/D

Raleigh, North Carolina 27615

We are sending the following items attached to this transmittal:

Copies	Date	Description
1	8/17/07	PCN Application ⁶ 7 copies for NCDWQ
1	8/17/07	Check for \$475 (NCDWQ copy only)

Remarks: _____

Signed: Jennifer Burdette c: Ian McMillan – NC Division of Water Quality

Daniel Sullivan – Contentnea Ck Dev Co

John Harris, PE – Consulting Engineer



NA Office Use Only:

Form Version March 05

USACE Action ID No. _____

DWQ No. _____

(If any particular item is not applicable to this project, please enter "Not Applicable" or "N/A".)

I. Processing

1. Check all of the approval(s) requested for this project:

- | | |
|---------------------------------------------------------------------|------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Section 404 Permit | <input type="checkbox"/> Riparian or Watershed Buffer Rules |
| <input type="checkbox"/> Section 10 Permit | <input type="checkbox"/> Isolated Wetland Permit from DWQ |
| <input checked="" type="checkbox"/> 401 Water Quality Certification | <input type="checkbox"/> Express 401 Water Quality Certification |

2. Nationwide, Regional or General Permit Number(s) Requested: 29

3. If this notification is solely a courtesy copy because written approval for the 401 Certification is not required, check here:

4. If payment into the North Carolina Ecosystem Enhancement Program (NCEEP) is proposed for mitigation of impacts, attach the acceptance letter from NCEEP, complete section VIII, and check here:

5. If your project is located in any of North Carolina's twenty coastal counties (listed on page 4), and the project is within a North Carolina Division of Coastal Management Area of Environmental Concern (see the top of page 2 for further details), check here:

II. Applicant Information

I. Owner/Applicant Information

Name: Contentnea Creek Development Company
Mailing Address: Attn: Daniel Sullivan
8502-202 Six Forks Road
Raleigh, North Carolina 27615
Telephone Number: (919) 961-3690 Fax Number: (919) 882-2341
E-mail Address: dan@standoutproperties.com

II. Agent/Consultant Information (A signed and dated copy of the Agent Authorization letter must be attached if the Agent has signatory authority for the owner/applicant.)

Name: Jennifer A. Burdette
Company Affiliation: Burdette Land Consulting, Inc.
Mailing Address: 308D W Millbrook Road, Suite 200
Raleigh, North Carolina 27609
Telephone Number: 919/841-9977 Fax Number: 919/841-9909
E-mail Address: JBurdetteBLC@bellsouth.net

III. Project Information

Attach a **vicinity map** clearly showing the location of the property with respect to local landmarks such as towns, rivers, and roads. Also provide a detailed **site plan** showing property boundaries and development plans in relation to surrounding properties. Both the vicinity map and site plan must include a scale and north arrow. The specific footprints of all buildings, impervious surfaces, or other facilities must be included. If possible, the maps and plans should include the appropriate USGS Topographic Quad Map and NRCS Soil Survey with the property boundaries outlined. Plan drawings, or other maps may be included at the applicant's discretion, so long as the property is clearly defined. For administrative and distribution purposes, the USACE requires information to be submitted on sheets no larger than 11 by 17-inch format; however, DWQ may accept paperwork of any size. DWQ prefers full-size construction drawings rather than a sequential sheet version of the full-size plans. If full-size plans are reduced to a small scale such that the final version is illegible, the applicant will be informed that the project has been placed on hold until decipherable maps are provided.

1. Name of project: Pennington South Subdivision
2. T.I.P. Project Number or State Project Number (NCDOT Only): NA
3. Property Identification Number (Tax PIN): 9772-93-8396
4. Location
County: Chatham Nearest Town: Pittsboro
Subdivision name (include phase/lot number): Pennington South
Directions to site (include road numbers/names, landmarks, etc.): Take US Highway 64 west beyond Lake Jordan. The site is located on the south side of US Highway 64 approximately 2000 feet west of Big Woods Road (SR 1716), east of Pittsboro in Chatham County, North Carolina.
5. Site coordinates (For linear projects, such as a road or utility line, attach a sheet that separately lists the coordinates for each crossing of a distinct waterbody.)
Decimal Degrees (6 digits minimum): 35.7364666 °N 79.065596 °W
6. Property size (acres): 68
7. Name of nearest receiving body of water: UT to Windfall Branch
8. River Basin: Cape Fear
(Note – this must be one of North Carolina's seventeen designated major river basins. The River Basin map is available at <http://h2o.enr.state.nc.us/admin/maps/>.)
9. Describe the existing conditions on the site and general land use in the vicinity of the project at the time of this application: The site consists primarily of mature hardwood forest except for a borrow area dominated by lespedeeza with a few loblolly pine saplings adjacent to US Highway 64. Figure 1 depicts the location of the property on the US Geological Survey

(USGS) Merry Oaks, NC 7.5-minute quadrangle topographic map. Figure 2 shows the location of the site on the applicable Chatham County Soil Survey map. Land use in the vicinity of the project consists of privately owned forestland, residential subdivisions, and Jordan Lake/New Hope Game Land.

10. Describe the overall project in detail, including the type of equipment to be used: The project involves construction of access roads necessary for residential subdivision development. An 11x17 and full size overall site plan provided by the project engineer, Mr. John Harris, PE, are attached. Insets A through F are provided to support the smaller sized site plan. Heavy equipment typically used for road construction will be used to complete the project.
11. Explain the purpose of the proposed work: The purpose of the project is to develop the 68-acre property into a single-family, residential subdivision with approximately 50 lots.

III. Prior Project History

If jurisdictional determinations and/or permits have been requested and/or obtained for this project (including all prior phases of the same subdivision) in the past, please explain. Include the USACE Action ID Number, DWQ Project Number, application date, and date permits and certifications were issued or withdrawn. Provide photocopies of previously issued permits, certifications or other useful information. Describe previously approved wetland, stream and buffer impacts, along with associated mitigation (where applicable). If this is a NCDOT project, list and describe permits issued for prior segments of the same T.I.P. project, along with construction schedules. Burdette Land Consulting, Inc. (BLC) conducted a surface water and wetland delineation of the property on July 12, 2006. On February 12, 2007, Mr. Monte Matthews of the USACE conducted a site visit to verify the delineation and evaluate those intermittent stream channels for important aquatic function. Attached are four copies of the "Wetland Survey" for the property (USACE copy only) and a letter from the property owner indicating that they do not request the USACE to evaluate the project using the Rapanos guidance. Please return three signed copies for the applicant's use. Mr. Eric Kulz of the NCDWQ also conducted an on-site intermittent/perennial determination for stream channel A on January 12, 2007. NCDWQ's letter documenting this determination is attached (DWQ Project #2007-0056). There are no previously issued permits for this project or property.

IV. Future Project Plans

Are any future permit requests anticipated for this project? If so, describe the anticipated work, and provide justification for the exclusion of this work from the current application. At this time, future permit requests are not anticipated for this project. The Chatham County Planned Department required that one of the proposed roads be stubbed at the eastern and western property boundaries to provide connectivity should those properties be developed by others in the future.

V. Proposed Impacts to Waters of the United States/Waters of the State

It is the applicant's (or agent's) responsibility to determine, delineate and map all impacts to wetlands, open water, and stream channels associated with the project. Each impact must be listed separately in the tables below (e.g., culvert installation should be listed separately from riprap dissipater pads). Be sure to indicate if an impact is temporary. All proposed impacts, permanent and temporary, must be listed, and must be labeled and clearly identifiable on an accompanying site plan. All wetlands and waters, and all streams (intermittent and perennial) should be shown on a delineation map, whether or not impacts are proposed to these systems. Wetland and stream evaluation and delineation forms should be included as appropriate. Photographs may be included at the applicant's discretion. If this proposed impact is strictly for wetland or stream mitigation, list and describe the impact in Section VIII below. If additional space is needed for listing or description, please attach a separate sheet.

1. Provide a written description of the proposed impacts: The proposed impacts consist of road and driveway crossings of stream channels that dissect the property.
2. Individually list wetland impacts. Types of impacts include, but are not limited to mechanized clearing, grading, fill, excavation, flooding, ditching/drainage, etc. For dams, separately list impacts due to both structure and flooding.

Wetland Impact Site Number (indicate on map)	Type of Impact	Type of Wetland (e.g., forested, marsh, herbaceous, bog, etc.)	Located within 100-year Floodplain (yes/no)	Distance to Nearest Stream (linear feet)	Area of Impact (acres)
NA					0
Total Wetland Impact (acres)					0

3. List the total acreage (estimated) of all existing wetlands on the property: 0.006
4. Individually list all intermittent and perennial stream impacts. Be sure to identify temporary impacts. Stream impacts include, but are not limited to placement of fill or culverts, dam construction, flooding, relocation, stabilization activities (e.g., cement walls, rip-rap, crib walls, gabions, etc.), excavation, ditching/straightening, etc. If stream relocation is proposed, plans and profiles showing the linear footprint for both the original and relocated streams must be included. To calculate acreage, multiply length X width, then divide by 43,560.

Stream Impact Number (indicate on map)	Stream Name	Type of Impact	Perennial or Intermittent?	Average Stream Width Before Impact	Impact Length (linear feet)	Area of Impact (acres)
1	UT to Windfall Branch	Permanent Culvert/rip rap	Intermittent	3	83	0.006
2	UT to Windfall Branch	Temporary Rip rap	Intermittent	3	10	0.0007

Stream Impact Number (indicate on map)	Stream Name	Type of Impact	Perennial or Intermittent?	Average Stream Width Before Impact	Impact Length (linear feet)	Area of Impact (acres)
3	UT to Windfall Branch	Permanent Culvert/rip rap	Intermittent	3	148	0.010
4	UT to Windfall Branch	Permanent Culvert/rip rap	Intermittent	3	28	0.002
5	UT to Windfall Branch	Permanent Culvert/rip rap	Intermittent	3	28	0.002
6	UT to Windfall Branch	Permanent Culvert/rip rap	Intermittent	3	28	0.002
Total Stream Impact (by length and acreage)					325	0.022

5. Individually list all open water impacts (including lakes, ponds, estuaries, sounds, Atlantic Ocean and any other water of the U.S.). Open water impacts include, but are not limited to fill, excavation, dredging, flooding, drainage, bulkheads, etc.

Open Water Impact Site Number (indicate on map)	Name of Waterbody (if applicable)	Type of Impact	Type of Waterbody (lake, pond, estuary, sound, bay, ocean, etc.)	Area of Impact (acres)
NA				0
Total Open Water Impact (acres)				0

6. List the cumulative impact to all Waters of the U.S. resulting from the project:

Stream Impact (acres):	0.022
Wetland Impact (acres):	0
Open Water Impact (acres):	0
Total Impact to Waters of the U.S. (acres)	0.022
Total Stream Impact (linear feet):	325

7. Isolated Waters

Do any isolated waters exist on the property? Yes No

Describe all impacts to isolated waters, and include the type of water (wetland or stream) and the size of the proposed impact (acres or linear feet). Please note that this section only applies to waters that have specifically been determined to be isolated by the USACE.

There are no isolated waters present on the property.

8. Pond Creation

If construction of a pond is proposed, associated wetland and stream impacts should be included above in the wetland and stream impact sections. Also, the proposed pond should be described here and illustrated on any maps included with this application.

Pond to be created in (check all that apply): uplands stream wetlands

Describe the method of construction (e.g., dam/embankment, excavation, installation of draw-down valve or spillway, etc.): NA

Proposed use or purpose of pond (e.g., livestock watering, irrigation, aesthetic, trout pond, local stormwater requirement, etc.): NA

Current land use in the vicinity of the pond: NA

Size of watershed draining to pond: NA Expected pond surface area: NA

VI. Impact Justification (Avoidance and Minimization)

Specifically describe measures taken to avoid the proposed impacts. It may be useful to provide information related to site constraints such as topography, building ordinances, accessibility, and financial viability of the project. The applicant may attach drawings of alternative, lower-impact site layouts, and explain why these design options were not feasible. Also discuss how impacts were minimized once the desired site plan was developed. If applicable, discuss construction techniques to be followed during construction to reduce impacts. The applicant requested a delineation of surface waters and wetlands prior to preliminary plan development to avoid impacts to jurisdictional areas to the maximum extent practicable. Due to the dissected topography of the site and limited soils suitable for septic system locations, two road and three driveway crossings are unavoidable to access areas of high ground on the property and necessary to efficiently utilize soil areas suitable for septic systems. All but one of the road/driveway crossings were designed to cross stream channels perpendicularly at sections of the channel with the least amount of meanders thereby reducing the linear footage of stream channel impacts. The engineer was unable to align the road crossing labeled as Impact #1 perpendicularly due to site constraints, but was still able to minimize the impact to the channel to a length comparable to a perpendicular crossing. Mr. John Harris, P.E. sized the culverts to ensure aquatic life passage by burying the culverts in accordance with the Nationwide and Water Quality Certification conditions. Cross-sections of each proposed culvert are provided on the attached Insets. Filter fabric will be placed under the riprap used to construct the temporary road crossing to ensure effective restoration of the stream channel's pre-construction contours once construction is complete.

VII. Mitigation

DWQ - In accordance with 15A NCAC 2H .0500, mitigation may be required by the NC Division of Water Quality for projects involving greater than or equal to one acre of impacts to freshwater wetlands or greater than or equal to 150 linear feet of total impacts to perennial streams.

USACE - In accordance with the Final Notice of Issuance and Modification of Nationwide Permits, published in the Federal Register on January 15, 2002, mitigation will be required when

necessary to ensure that adverse effects to the aquatic environment are minimal. Factors including size and type of proposed impact and function and relative value of the impacted aquatic resource will be considered in determining acceptability of appropriate and practicable mitigation as proposed. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland and/or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferable in the same watershed.

If mitigation is required for this project, a copy of the mitigation plan must be attached in order for USACE or DWQ to consider the application complete for processing. Any application lacking a required mitigation plan or NCEEP concurrence shall be placed on hold as incomplete. An applicant may also choose to review the current guidelines for stream restoration in DWQ's Draft Technical Guide for Stream Work in North Carolina, available at <http://h2o.enr.state.nc.us/newetlands/strmgide.html>.

1. Provide a brief description of the proposed mitigation plan. The description should provide as much information as possible, including, but not limited to: site location (attach directions and/or map, if offsite), affected stream and river basin, type and amount (acreage/linear feet) of mitigation proposed (restoration, enhancement, creation, or preservation), a plan view, preservation mechanism (e.g., deed restrictions, conservation easement, etc.), and a description of the current site conditions and proposed method of construction. Please attach a separate sheet if more space is needed.

The applicant avoided impacts to streams and wetlands where possible and minimized stream channel impacts that were unavoidable to the maximum extent practicable. A 50-foot-wide riparian buffer will be maintained around stream channels present within the development in accordance with Chatham County's requirements and will serve as a permanent, vegetative buffer to those stream channels. Mr. Matthews of the USACE determined that the intermittent stream channels at Impacts 1,2,4,5, and 6 do not exhibit important aquatic function, therefore, we request a waiver from the 300-foot Nationwide Permit #29 limit and requirement for compensatory mitigation from the USACE for these impacts. Please refer to flag #201 placed by Mr. Matthews to mark the start point of important aquatic function shown on the overall site plan for the project. Therefore, the total permanent impacts for the project include 148 linear feet of an intermittent stream channel that exhibits important aquatic function and 167 linear feet of intermittent stream channel that does not. Because the applicant minimized the project impacts to the maximum extent practicable, has established vegetative buffers on the site, and proposes less than 150 linear feet of impacts to the intermittent stream channel that exhibits important aquatic function, BLC believes that compensatory mitigation should not be required for the Nationwide Permit. Additionally, Mr. Eric Kulz determined that the stream channels above the property line are intermittent and would not require mitigation by the NCDWQ including Impact 3. Because all of the proposed impacts have been minimized to the maximum extent practicable and involve intermittent stream channels, BLC does not believe that compensatory mitigation should be required for the 401 Water Quality Certification.

2. Mitigation may also be made by payment into the North Carolina Ecosystem Enhancement Program (NCEEP). Please note it is the applicant's responsibility to contact the NCEEP at (919) 715-0476 to determine availability, and written approval from the NCEEP indicating that they are will to accept payment for the mitigation must be attached to this form. For additional information regarding the application process for the NCEEP, check the NCEEP website at <http://h2o.enr.state.nc.us/wrp/index.htm>. If use of the NCEEP is proposed, please check the appropriate box on page five and provide the following information:

Amount of stream mitigation requested (linear feet): NA
Amount of buffer mitigation requested (square feet): NA
Amount of Riparian wetland mitigation requested (acres): NA
Amount of Non-riparian wetland mitigation requested (acres): NA
Amount of Coastal wetland mitigation requested (acres): NA

VIII. Environmental Documentation (required by DWQ)

1. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land? Yes No
2. If yes, does the project require preparation of an environmental document pursuant to the requirements of the National or North Carolina Environmental Policy Act (NEPA/SEPA)?
Note: If you are not sure whether a NEPA/SEPA document is required, call the SEPA coordinator at (919) 733-5083 to review current thresholds for environmental documentation.
Yes No
3. If yes, has the document review been finalized by the State Clearinghouse? If so, please attach a copy of the NEPA or SEPA final approval letter. Yes No

IX. Proposed Impacts on Riparian and Watershed Buffers (required by DWQ)

It is the applicant's (or agent's) responsibility to determine, delineate and map all impacts to required state and local buffers associated with the project. The applicant must also provide justification for these impacts in Section VII above. All proposed impacts must be listed herein, and must be clearly identifiable on the accompanying site plan. All buffers must be shown on a map, whether or not impacts are proposed to the buffers. Correspondence from the DWQ Regional Office may be included as appropriate. Photographs may also be included at the applicant's discretion.

1. Will the project impact protected riparian buffers identified within 15A NCAC 2B .0233 (Neuse), 15A NCAC 2B .0259 (Tar-Pamlico), 15A NCAC 02B .0243 (Catawba) 15A NCAC 2B .0250 (Randleman Rules and Water Supply Buffer Requirements), or other (please identify _____)? Yes No

2. If "yes", identify the square feet and acreage of impact to each zone of the riparian buffers. If buffer mitigation is required calculate the required amount of mitigation by applying the buffer multipliers.

Zone*	Impact (square feet)	Multiplier	Required Mitigation
1	NA	3 (2 for Catawba)	NA
2	NA	1.5	NA
Total	NA		NA

* Zone 1 extends out 30 feet perpendicular from the top of the near bank of channel; Zone 2 extends an additional 20 feet from the edge of Zone 1.

3. If buffer mitigation is required, please discuss what type of mitigation is proposed (i.e., Donation of Property, Riparian Buffer Restoration / Enhancement, or Payment into the Riparian Buffer Restoration Fund). Please attach all appropriate information as identified within 15A NCAC 2B .0242 or .0244, or .0260. NA
-
-

X. Stormwater (required by DWQ)

Describe impervious acreage (existing and proposed) versus total acreage on the site. Discuss stormwater controls proposed in order to protect surface waters and wetlands downstream from the property. If percent impervious surface exceeds 20%, please provide calculations demonstrating total proposed impervious level. Prior to development, the site was forested and did not contain impervious acreage. Once the project is complete, the percent impervious surface is anticipated to be less than 15% based on the lot density proposed. Chatham County's 50-foot water hazard buffers are anticipated to protect surface waters and wetlands downstream from the property.

XI. Sewage Disposal (required by DWQ)

Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility. Wastewater generated from each lot will be disposed of through individual septic systems approved by Chatham County.

XII. Violations (required by DWQ)

Is this site in violation of DWQ Wetland Rules (15A NCAC 2H .0500) or any Buffer Rules?
 Yes No

Is this an after-the-fact permit application? Yes No

XIII. Cumulative Impacts (required by DWQ)

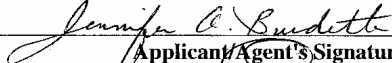
Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality? Yes No

If yes, please submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent North Carolina Division of Water Quality policy posted on our website at <http://h2o.enr.state.nc.us/ncwetlands>. If no, please provide a short narrative description: The proposed infrastructure serves only the proposed residential subdivision; therefore, it is not anticipated to result in additional development.

XIV. Other Circumstances (Optional):

It is the applicant's responsibility to submit the application sufficiently in advance of desired construction dates to allow processing time for these permits. However, an applicant may choose to list constraints associated with construction or sequencing that may impose limits on work schedules (e.g., draw-down schedules for lakes, dates associated with Endangered and Threatened Species, accessibility problems, or other issues outside of the applicant's control).

NA



Applicant/Agent's Signature

8/17/07

Date

(Agent's signature is valid only if an authorization letter from the applicant is provided.)

An agent authorization form signed by a representative of the current property owner is attached.