



## REQUEST FOR BOARD ACTION

ITEM NO: 20.

**DATE OF MEETING:** February 21, 2012

**REQUESTED BY:** Ashley Frank, Planner II, Planning & Community Development

**SHORT TITLE:** Resolution to Approve a Special Use Permit (SUP) for the Construction and Operation of an On-Site Wastewater Treatment Facility.

**BACKGROUND:** Stroud Engineering, P.A., applicant, on behalf of Hampstead Commons, LLC, owners, is requesting approval a Special Use Permit (SUP) for the construction and operation of an on-site Wastewater Treatment Facility located on three (3) acres along the north western boundary of the Hampstead Commons Master Planned Community. The project is located along the west side of U.S. Highway 17, north of Caison Drive, in Hampstead. The property may be identified as PIN: 4204-10-9252-0000, and is currently zoned PD, Planned Development. According to the Pender County Zoning Ordinance § 8.9 Table of Permitted Uses; Sewer/Water Treatment, Storage & Processing Facilities, Including Lifts and/or Pump Stations are permitted via Special Use Permit (SUP) in the PD District.

**SPECIFIC ACTION REQUESTED:** To hold a public hearing and consider the approval of a Special Use Permit.

**RESOLUTION**

**RESOLUTION: NOW, THEREFORE, BE IT RESOLVED**, that on February 21, 2012 the Pender County Board of Commissioners (approved, modified, denied) a Resolution for a Special Use Permit (SUP) for the Construction and Operation of On-Site Wastewater Treatment Facility, as described herein, and the Chairman/County Manager is authorized to execute any/all documents necessary to implement this resolution.

**AMENDMENTS:**

MOVED: \_\_\_\_\_ SECONDED: \_\_\_\_\_

APPROVED \_\_\_\_\_ DENIED \_\_\_\_\_ UNANIMOUS

YEA VOTES: Brown \_\_\_ Tate \_\_\_ Rivenbark \_\_\_ Ward \_\_\_ Williams \_\_\_

\_\_\_\_\_  
Chairman 02/21/2012  
Date

\_\_\_\_\_  
ATTEST 02/21/2012  
Date

## PLANNING STAFF REPORT

### Special Use Permit

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#### SUMMARY:

**Hearing Date:** February 21, 2012

**Applicant:** Stroud Engineering, P.A.

**Property Owner:** Hampstead Commons, L.L.C.

**Case Number:** 10669

**Land Use Proposed:** Stroud Engineering, P.A., applicant, on behalf of Hampstead Commons, LLC, owners, is requesting approval a Special Use Permit (SUP) for the construction and operation of an onsite Wastewater Treatment Facility located on three (3) acres along the north western boundary of the project. This wastewater facility will be for the approved Master Planned Community of Hampstead Commons; a phased development consisting of 384 multifamily units and 200,000 ft<sup>2</sup> of commercial space to be located on 63.22 acres. This development was reviewed and approved under the 1988-2010 Pender County Zoning Ordinance.

**Property Record Number and Location:** The proposed project is located along the west side of U.S. Highway 17, north of Caison Drive, in Hampstead. The property may be identified as PIN: 4204-10-9252-0000.

**Zoning District of Property:** The property is currently zoned PD, Planned Development, and according to the Pender County Zoning Ordinance § 8.9 Table of Permitted Uses; Sewer/Water Treatment, Storage & Processing Facilities, Including Lifts and/or Pump Stations are permitted via Special Use Permit (SUP) in the PD District.

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**Project History:** The Pender County Planning Board, on December 1, 2009, approved the Master Plan for Hampstead Commons, a phased development consisting of 384 multifamily units and 200,000 ft<sup>2</sup> of commercial space to be located on 63.22 acres located along the west side of U.S. Highway 17, north of Caison Drive, in Hampstead.

On October 4, 2011 the Pender County Planning Board approved a revision to the project modifying the previously approved Master Plan and Phase I Preliminary plan, consisting of changes to the road alignment, building layout, and adjustment to the phase boundaries. This revision included the modification to wastewater disposal method, which was previously approved as an onsite (traditional) wastewater disposal method.

The Pender County Planning Board at their February 7, 2012 approved a revision to the approved Master Development Plan and Phase I Preliminary Plat of Hampstead Commons to allow the development to utilize an onsite package plant as the means for wastewater disposal. At the time of submittal the applicant proposed wastewater service to be provided by the Pender County/ IntegraWater Public Private Partnership; that partnership was disbanded.

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#### PROJECT DESCRIPTION:

The applicant, Stroud Engineering, P.A., applicant, on behalf of Hampstead Commons, L.L.C., owners, is requesting approval a Special Use Permit (SUP) for the construction and operation of an onsite Wastewater Treatment Facility located on three (3) acres along the north western boundary of the project.

The proposal is for 54,720 gallons per day facility, treating the water to re-use standards which exceeds the requirement for consideration as clean groundwater. Therefore, the water may be used for irrigation for the master planned community.

There are approximately 2.22 acres of wetlands as determined by the Army Corps of Engineers. Any development within these areas will be subject to the permit requirements of Section 404 of the Clean Water Act. There is a portion of the project area that is located within the "Approximate Zone A" Special Flood Hazard Area. Prior to the issuance of Final Zoning a flood study must be submitted and approved as required in the Pender County Flood Damage Prevention Ordinance.

Access to the facility will be provided via Casion Drive; the North Carolina Department of Transportation (NC DOT) has issued a driveway permit for the Hampstead Commons development.

A portion of the Hampstead Commons project is located within the E-H Corridor of the R-3300 project, known as the Hampstead Bypass. The Wilmington Metropolitan Planning Organization has filed an Official Corridor Map for this alignment. According to the WMPO, if the proposed development is not impacted by the approved corridor map alignment the development would be permitted.

Prior to the issuance of zoning approval and building permits; a commercial site plan review must be submitted and approved in accordance with 9.14 of the Pender County Zoning Ordinance. A part of this review will include compliance with Article 8, Landscaping and Buffering. The site plan submitted with this application is considered conceptual and does not reflect any approvals, regulations in effect or any additional conditions imposed on this SUP.

All applicable local, state and federal permits must be obtained prior to the construction and operation of the facility as well as the Approximate Zone "A" Flood Study.

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#### **EVALUATION:**

- A. *Public Notifications:*** Advertisements for the proposal have been placed in the *Topsail Voice* and *The Pender Post*. Adjacent property owners were notified by first class mail.
- B. *Basis for Granting SUP:*** See Attachment A for approval procedures (§15.3 of the Pender County Zoning Ordinance) and revocation, expiration and revision procedures (§15.4b, c, and h of the Pender County Zoning Ordinance).
- C. *Zoning Ordinance Compliance:*** The property is currently zoned PD, Planned Development, and according to the Pender County Zoning Ordinance, § 8.9 Table of Permitted Uses; Sewer/Water Treatment, Storage & Processing Facilities, Including Lifts and/or Pump Stations are permitted via Special Use Permit (SUP) in the PD District.
- D. *2005 CAMA Land Use Plan Compliance:*** The Pender County Future Land Use Map classifies the property as Urban Growth Area with Conservation I & II overlays. Urban Growth Areas are planned for high net density residential development which is dependent upon the types and levels of services that are available. Factors in determining preferred locations for higher density residential development shall include: close proximity to employment and shopping centers, access to major thoroughfares and transit systems, the availability of public services and facilities, and compatibility with adjacent areas and land uses. This development proposal is consistent with the 2005 CAMA Land Use Plan

E. *Existing Land Use in Area:* The project site is bounded to the north by a plant nursery and Holly Shelter Game Land. To the west contains the previously approved Bayberry development which contains a mix of residential and commercial uses, and to the south contains businesses classified as mini-warehouses and a yacht building business.

F. *Site Access Conditions:* The property has direct access to US Highway 17 via Casion Drive.

G. *Conditions To Consider In Issuing A Revision of the Special Use Permit For This Project:*

1. The applicant shall meet all other local, state and federal regulations.
2. Unless approved otherwise as a condition of the permit, a Special Use Permit shall expire and become void if a final zoning permit has not been issued for the project within 12 months.
3. The project shall comply with all requirements of the Pender County Zoning Ordinance, Adopted July 1, 1988, and Codified with Correction and Amendments as of February 2, 2009.
4. Any violations of the conditions of this permit, confirmed by the Zoning Administrator shall result in this permit becoming void, if not corrected within 30 days of receipt of the notice of violation.
5. The obligations imposed by this permit will be the responsibility of the property owner and operator and shall continue in effect for the duration of this permit
6. The project shall be developed and maintained in accord with the conditions contained in this permit.
7. Prior to the issuance of zoning approval and building permits; a commercial site plan review must be submitted and approved in accordance with 9.14 of the Pender County Zoning Ordinance. A part of this review will include compliance with Article 8, Landscaping and Buffering.
8. All applicable local, state and federal permits must be obtained prior to the construction and operation of the facility as well as the Approximate Zone "A" Flood Study.
9. No junk, debris, trash, or inoperable vehicles, recycled or salvaged materials shall be stored on the site. All debris shall be removed from the site prior to issuance of a zoning permit.
10. Any physical relocation and/or improvements after the completion of the original wastewater treatment facility will require an major revision to the original Special Use Permit,

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**TECHNICAL REVIEW COMMITTEE (TRC) RESPONSES:**

**Cape Fear Council of Governments RPO**

*In as much as this is in the MPO's area, I have no comment.*

**Four County Electric Company**

*No response.*

**NC DENR Division of Coastal Management**

*It appears this project may fall outside CAMA jurisdiction, but if any part of the project would fall within 30' of the high water line of a tidal and/or navigable waterbody, or within the Coastal Wetland AEC, then the project would require a CAMA major permit.*

**NC DENR Division of Forestry**

*No response.*

**NC DENR Division of Land Resources**

*No response.*

**NC DENR Division of Waste Management**

*No response.*

**NC DENR Division of Water Quality**

*No response.*

**NC DOT Division of Highways**

*This site will use the same driveway where we have an approved driveway permit. No additional comments.*

**NC DOT Transportation Planning Branch**

*No response.*

**NC Office of State Archaeology**

*No response.*

**NC Wildlife Resources Commission**

*No response.*

**Pender County Building Inspections**

*No response.*

**Pender County Emergency Management**

*No response.*

**Pender County Environmental Health**

*No response.*

**Pender County Fire Marshall**

*No response.*

**Pender County Parks and Recreation**

*No response.*

**Pender County Public Library**

*No response.*

**Pender County Public Utilities**

*No comment.*

**Pender County Schools**

*No response.*

**Pender County Sheriff's Department**

*No response.*

**Pender County Soil and Water Conservation District**

*No response.*

**Progress Energy Corporation**

*No response.*

**US Army Corps of Engineers**

*No response.*

**Wilmington Metropolitan Planning Organization**

*No response.*

## Attachment A

### 15.3 Procedures for Reviewing Applications

The special uses, as specified in the various districts, may be established only after review and approval by the Board of Commissioners.

The Board of County Commissioners, acting in a quasi-judicial manner and setting, shall hear evidence from the applicant and any interested members of the public. The Board of Commissioners shall hold a public hearing on the application for a Special Use Permit within sixty (60) days after the completed application is filed. The Zoning Administrator shall cause notice of the hearing to be published once a week for two successive calendar weeks. The notice shall be published for the first time not less than ten (10) nor more than twenty-five (25) days before the date fixed for the hearing. All Special Use Permit applications must be presented to the Zoning Administrator for a determination of completeness. An appeal from a completeness determination may be had to the Board of Adjustment or Superior Court within twenty (20) days of the determination.

The Board of Commissioners shall approve, modify, or deny the application for a Special Use Permit. In approving a Special Use Permit the Board of Commissioners, with due regard to the nature and state of all adjacent structures and uses in the district within same is located, shall make written findings that the following are fulfilled:

- A. The use requested is listed among the special uses in the district for which application is made; or is similar in character to those listed in that district;
- B. The requested use will not impair the integrity or character of the surrounding or adjoining districts, nor adversely affect the safety, health, morals, or welfare of the community or of the immediate neighbors of the property;
- C. The proposed use shall not constitute a nuisance or hazard.
- D. The requested use will be in conformity with the Pender County Land Use Plan and other official plans or policies adopted by the Board of County Commissioners;
- E. Adequate utilities, access roads, drainage, sanitation or other necessary facilities have been or are being provided;
- F. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize the traffic congestion in the public roads; and
- G. That the special use shall, in all other respects, conform to the applicable regulations of the district in which it is located;
- H. The proposed use shall not adversely affect surrounding uses and shall be placed on a lot of sufficient size to satisfy the space requirements of said use.

### B Revocation

In any case where the Special Use Permit or the conditions of a Special Use Permit have not been or are not being complied with, the Zoning Administrator may initiate a notice of violation for the provisions of this ordinance and the conditions of the Special Use Permit not in compliance or the Zoning Administrator, may initiate notice of a public hearing to consider revocation of the permit by the Board of Commissioners or both actions may be initiated. Procedures for notice of such hearing shall be the same as procedures for consideration of an initial application for a Special Use Permit and the permittee shall be notified.

After a public hearing has been held, the Board of Commissioners may revoke the Special Use Permit upon finding any of the following:

- 1) That the approval was obtained by fraud.
- 2) That the use for which such approval was granted is not being executed.
- 3) That the use for which such approval was granted has ceased to exist or has been suspended for six months.
- 4) That the permit granted is being, or recently has been exercised contrary to the terms or conditions of such approval.
- 5) That the permit granted is in violation of an ordinance or statute.
- 6) That the use for which the approval was granted was so exercised as to be detrimental to the public health or safety, or so as to constitute a nuisance.

### C. Expiration

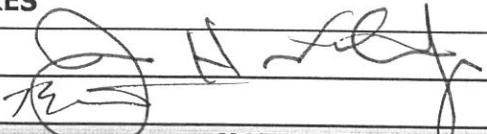
Unless approved otherwise as a condition of the permit, a Special Use Permit shall expire and become void, if a final zoning permit has not been issued for the project within 12 months after the Notice of Approval of the Special Use Permit has been served on the applicant. The Zoning Administrator may provide up to two extensions of the expiration date by no more than 6 months each, for complex projects requiring major state or federal permits, upon receipt of a written request for such extension by the applicant detailing the reasons for delay in completion of the requirements for the zoning permit.

### H. Revisions

Major revisions to a Special Use Permit must be submitted to the Board of Commissioners. All legal notice and application fee requirements must be met for major revisions. Revisions that are considered minor revisions to an approved Special Use Permit may be reviewed and approved by the Planning Director after basic submission requirements have been completed. All revisions approved by the Planning Director must meet the original conditions of the permit as approved by the Board of Commissioners and current provisions of the Zoning Ordinance. The addition of an accessory structure less than 1000 sq. ft., addition of parking or other ancillary facilities or uses or the addition of similar product lines are examples of revisions that may be considered minor revisions (Rev. 01.20.04).

PERMITTED USES	PD	R-20C	R-20	R-15	R-10	B-1	B-2	B-3	I-1	I-2	A	RT	RA	WS All
<b>MANUFACTURING (Con't)</b>														
Petroleum & Related Terminals/Storage									S	S				
Primary Metal										S			S	
Printing & Publishing							P		P	P		S	S	
Rubber & Miscellaneous Products									S	P			S	
Slaughter House									S	S			S	
Stone, Clay, & Glass Products									S	S			S	
Textile Manufacturing									P	P			S	
Tobacco Manufacturing									S	P			S	
Transportation Equipment									S	P			S	
<b>TRANSPORTATION, UTILITIES</b>														
Air Transportation(Landing Strip, Air Terminal or Airport)	P									S	S		S	
Boat Access Facility	SPB	S	S	S	S	S	S	S	S	S		S	S	
Bus & Taxi Terminals						P	P	P	P	P	P	S	S	
Dry Storage Boat Facility	P	S	S	S	S	S	S	S	S	S		S	S	
Liquid Propane, Natural Gas, Sewer & Water, Collection, Distribution/Transmission Lines	PN	PN	PN	PN	PN	PN	PN	PN	PN	PN	PN	PN	PN	
Liquid Propane, Natural Gas Storage & Processing Facilities	S	S	S	S	S	S	S	S	S	S	S	S	S	
<b>Sewer/Water Treatment, Storage &amp; Processing Facilities, Including Lifts and/or Pump Stations</b>	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Electric/Communication Distribution Lines	PN	PN	PN	PN	PN	PN	PN	PN	PN	PN	S	PN	PN	
Electric/Communication Transmission Lines	S	S	S	S	S	S	S	S	S	S	S	S	S	
Electrical Sub-Stations	S	S	S	S	S	S	S	S	S	S	S	S	S	
Electric Generating Facility, Excluding Nuclear & Facilities Incinerating Waste Materials									S	S	S	S	S	
Electric, Liquid Propane, Natural Gas, Sewer & Water, Materials, Equipment, Maintenance Facility									P	P				
Marina (As Defined Herein)(ZI 38)	P	S	S	S	S	S	S	S	S	S		S	S	
Motor Freight Terminals & Warehousing							S		P	P	S		S	

## APPLICATION FOR SPECIAL USE PERMIT

THIS SECTION FOR OFFICE USE			
Application No.	Case # 10669	Date	01.13.2012
Application Fee	\$ 330.00	Receipt No.	116701
Pre-Application Conference	N/A	Hearing Date	2.21.2012
<b>SECTION 1: APPLICANT INFORMATION</b>			
Applicant's Name:	Hampstead Commons, LLC	Owner's Name:	Same
Applicant's Address:	1510 S. Third Street	Owner's Address:	
City, State, & Zip	Wilmington, NC 28401	City, State, & Zip	
Phone Number:	(910) 251-5030	Phone Number:	
Legal relationship of applicant to land owner: Same			
<b>SECTION 2: PROJECT INFORMATION</b>			
Property Identification Number (PIN):	4204-10-9252-0000	Total property acreage:	3 Acres
Zoning Classification:	PD	Acreage to be disturbed:	3 Acres
Project Address :	US Hwy 17	NAICS Code:	
Description of Project Location:	Caison Drive and US Hwy 17 in Hampstead		
Describe activities to be undertaken on project site:	Residential Development of 144 Apartments		
	Installing a package wastewater treatment plant		
<b>SECTION 3: SIGNATURES</b>			
Applicant's Signature		Date:	1/7/2012
Owner's Signature		Date:	1.6.2012
<b>NOTICE TO APPLICANT</b>			
<ol style="list-style-type: none"> <li>1. Applicant must also submit the information described on the Special Use Checklist.</li> <li>2. Applicant or agent authorized in writing must attend the public hearing.</li> <li>3. Once the public hearing has been advertised, the case will be heard unless the applicant withdraws the application or unless the Board of Commissioners or other authorized person agrees to table or delay the hearing.</li> <li>4. Applicant may wish to review the required findings for approval of a Special Use Permit found on page 1 of this application</li> <li>5. <b>Permit will become void after 12 months if a final zoning permit is not obtained, unless specifically requested at the time of public hearing.</b></li> </ol>			

Office Use Only						330.00
<input checked="" type="checkbox"/>	General/ Fees: \$300 +\$10 per acre over 5 acres, Max. of \$5,000	Total Fee Calculation: \$ <u>330.00</u>				
<input type="checkbox"/>	Tower over 75 Feet/ Fees \$500					
<input type="checkbox"/>	Minor Revisions /Fees \$100	Application#:				
<input type="checkbox"/>	Mining Fees \$750	Date of Hearing: <u>Feb. 21, 2012</u>				
Attachments Included with Application: (Please include # of copies)						
CD /other digital version	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Plan Sets <u>12</u>	# of large <u>2</u>	# of 11X17 <u>12</u>	Other documents/Reports	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Payment Method:		Cash : <input type="checkbox"/> \$ _____		Credit Card: <input type="checkbox"/> Master Card <input type="checkbox"/> Visa		Check: <input checked="" type="checkbox"/> Check # <u>8022</u>
Application received by:		<u>Ashley D. Grank</u>				Date: <u>Feb. 16, 2012</u>
Application completeness approved by:		<u>Ashley D. Grank</u>				Date: <u>1.6.2012</u>

### Special Use Permit Checklist

<input type="checkbox"/>	Signed Application Form (Both Applicant and Owner)
<input type="checkbox"/>	Application fee
<input checked="" type="checkbox"/>	Legible list of all property owners adjacent to the property upon which the use is to be located. The list shall include the mailing address & physical address of these property owners (The application will not be advertised for public hearing until the list is accurate & complete)
<input checked="" type="checkbox"/>	One business size envelope legibly addressed with first class postage for each of the adjacent property owners on the above list.
<input type="checkbox"/>	<b>Project Narrative</b> --Written description of the project (max of 3 pages) including the following: <ul style="list-style-type: none"> <li><input type="checkbox"/> Location of the project and type of access to project site</li> <li><input type="checkbox"/> Detailed description of the activities to be undertaken on the site, including hrs. of operation, # of employees, etc.</li> <li><input type="checkbox"/> Description of all construction activities to be undertaken on the site</li> <li><input type="checkbox"/> Describe type of utilities that will serve project and status of approval from applicable providers</li> <li><input type="checkbox"/> List of all state and federal permits that will be required for the project</li> <li><input type="checkbox"/> Describe any potential impacts the project will have on the community or adjacent properties such as traffic, noise, etc. and explain efforts to mitigate these impacts (<u>this item must be addressed by the applicant</u>). The applicant may also wish to describe any positive benefits the project will provide for the community and/or neighbors of the project.</li> </ul>
<input type="checkbox"/>	<b>Project Map(s)</b> --Map or maps of the special use project site with boundaries of the project if less than the parcel boundaries. This map or maps shall be drawn to a <u>readable</u> scale. The scale shall be not more than 200' to the inch. The map shall display an accurate bar graph scale, date prepared, north arrow and the author of the map. This map(s) shall show the following: <ul style="list-style-type: none"> <li><input type="checkbox"/> Boundaries of the property upon which the special use will be located, the acreage in the property and project site, with a north arrow and bar graph.</li> <li><input type="checkbox"/> Access from the site and/or project boundaries to the nearest publicly maintained road.</li> <li><input type="checkbox"/> Location of any existing structures or uses on the property and within 50' of the property.</li> <li><input type="checkbox"/> Location of the project boundaries if they do not coincide with the property boundaries.</li> <li><input type="checkbox"/> Existing and proposed structures, other on-site improvements, and location of all activities associated with the use, location of well, septic tank, and/or other utilities.</li> <li><input type="checkbox"/> Boundary of all clearing, grading, and/or land disturbing activities on the site and the calculated acreage of all land disturbing activities on the site.</li> <li><input type="checkbox"/> Parking, loading areas, and access to the project (See Article 7, Pender County UDO)</li> <li><input type="checkbox"/> Landscaping and buffering (See Article 8, Pender County UDO)</li> <li><input type="checkbox"/> All signs to be located on the property (See Article 10, Pender County UDO)</li> <li><input type="checkbox"/> Pedestrian walks, area lighting and flood lighting.</li> <li><input type="checkbox"/> Existing natural features of the site including, wooded areas, tree lines, ponds, streams, other water bodies or ditches on or adjacent to the site, designated flood hazard areas &amp; known or designated wetlands on the site.</li> <li><input type="checkbox"/> Drainage plan and/or direction of flow of runoff from the project and site.</li> <li><input type="checkbox"/> After review by the Planning and Community Development Department, additional information may be required to be submitted.</li> <li><input type="checkbox"/> Two full size and twenty reduced size (max. 11"x17") copies of this map(s) shall be submitted.</li> </ul>
<b>RETURN COMPLETED APPLICATION TO:</b> Pender County Planning & Community Development P.O. Box 1519 Burgaw, NC 28425	



**STROUD ENGINEERING, P.A.**

CONSULTING ENGINEERS  
102-D CINEMA DRIVE  
WILMINGTON, NORTH CAROLINA 28403  
(910) 815-0775

January 6, 2011

Pender County Planning Department  
805 South Walker Street  
Burgaw, NC 28425  
Attn: Ashley Frank

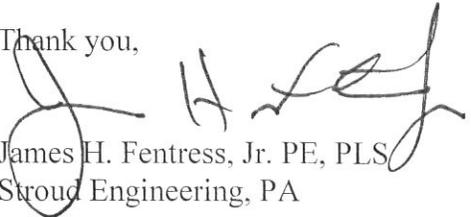
Re: Hampstead Commons, Wastewater Treatment Plant  
Special Use Permit Application

Dear Ashley,

Unfortunately, the possibility of public sewer to serve this project appears unobtainable. As such, we are prepared to return to our original proposal of providing onsite treatment and disposal for the waste water. The proposal is now to treat the waste water to reuse standards and use it for irrigation on the apartment site campus. Please find the attached application, plan set, and narrative in effort of having this project reviewed for issuance of a Special Use Permit for the waste water treatment plant. We hope to be.

We hope that this submittal will suffice for the Board of Commissioners to properly review as a part of their the February agenda. If there is any additional information necessary to assist in this process please feel free to contact me in this regard.

Thank you,

  
James H. Fentress, Jr. PE, PLS  
Stroud Engineering, PA

attachments

JHF/jf

file: f:\master\pw-615\wpd\supcover.doc

107 COMMERCE ST.  
SUITE B  
GREENVILLE, NC 27858  
(252) 756-9352

102-D CINEMA DRIVE  
WILMINGTON, NC 28403  
(910) 815-0775

HESTRON PLAZA TWO  
151-A HWY. 24  
MOREHEAD CITY, NC 28557  
(252) 247-7479

# Project Narrative

## Waste Water Treatment Plant Special Use Permit

### Hampstead Commons

#### Project Summary

Hampstead Commons, LLC is proposing to construct a multi-family development on approximately 63.22 acres of land located just north of Hampstead, NC on the corner of Caison Drive and US 17. The proposed access will be off Caison Drive. The site is afforded public water and is to be sewered by a proposed wastewater treatment facility. Hampstead Commons, LLC is seeking a Special Use Permit to enable the construction of this facility.

#### Site Description

The topography of the site varies, with slopes ranging from 0% to 5% on upland sections and slopes from 5% to 10% around wetlands. The site is presently sparsely wooded. There are a couple of isolated wetlands on the site, as well as a larger wetland on the north eastern boundary. The waste water treatment plant site straddles a ridge which drains west to Turkey Creek and east to the Intracoastal Waterway. Either drainage route has significant overland reach before confluence with any classified streams. The entire project site is considered not bound to SA water regulations.

#### Permits Required

Hampstead Commons, LLC is presently soliciting a non discharge permit through the North Carolina Department of Environment and Natural Resources, NCDENR, Water Quality Section for the waste water collection, treatment facility, and associated onsite irrigation. I am including as attachment to this narrative the cover sheet and conclusion drawn from a Hydrogeologic Site Evaluation provided by Edwin Andrews and Associates, P.C. that speaks to the ability of this site to assimilate the effluent as irrigation to the apartment campus. The reuse of this treated wastewater will prove beneficial to the maintenance of the site landscaping. Permits for the project water lines, stormwater management, and erosion control from NCDENR have been procured. The proposed driveway onto Caison Drive has been permitted through the North Carolina Department of Transportation. A Jurisdictional Determination has been obtained from the United States Army Corps of Engineers. The cover sheets of all associated permits are attached.

#### Adjoining Property

All of the adjoining property is zoned except along the northern corner which is the Holly Shelter Game Land. The property to the south is currently a storage facility and a boat manufacturing business. The property to the north east was a plant nursery however is currently not in business. Property across US 17 exists as the residential planned development Belvedere Plantation including an apartment complex of similar character as what is proposed by this project.

#### Soils

Soils in the project area are mapped in the Pender County Soil Survey as Muirville Fine Sand, Leon fine sand, and Kureb sand. Muirville Fine Sand and Kureb are characterized as a well drained soil with rapid infiltration and slow surface runoff. Leon fine sand is characterized as a poorly drained soil with rapid infiltration and slow surface runoff. The locations of these soils has been given due consideration in the siting of the treatment facility.



## Potential Impacts

The environmental benefits of the treatment facility include a net improvement of groundwater quality when compared to a large septic system. Local surface waters will be protected through utilization of the sophisticated treatment process proposed and required to permit the facility with NCDENR. A community wastewater treatment system will ultimately have a positive impact on adjacent properties as the area becomes more developed.

### Supporting Information-Required Findings

1. *The use is listed among special uses in the district for which application is made; or is similar in character to those listed in that district.*

Wastewater treatment facilities are allowed in PD zones by Special Use per the Pender County Zoning Ordinance.

2. *The requested use will not impair the integrity or character of the surrounding or adjoining districts, nor adversely affect the safety, morals, or welfare of the community or of the immediate neighbors of the property;*

The requested use will enable the development of the subject property in a manner which is consistent with adjacent uses while minimizing the impacts of said development in an environmentally and economically valuable portion of the county.

3. *The proposed use shall not constitute a nuisance or hazard.*

Measures will be taken to reduce or eliminate sights, sounds, and odors which can accompany wastewater treatment facilities. These measures, paired with setbacks and vegetative screening will mitigate nuisances commonly associated with such facilities. Fencing will be installed around the facility to prevent unauthorized entry.

4. *The requested use will be in conformity with the land use plan;*

The requested use will enable the development of the subject property in a manner which is consistent with the Pender County Land Use Plan. The subject property is identified as an urban growth area.

5. *Adequate utilities, access roads, drainage, sanitation or other necessary facilities have been or are being provided;*

Proposed improvements, in addition to a community wastewater system, include extension of adjacent public waterlines, a stormwater collection system with ponds for flood and pollution control, and recreational areas.

6. *That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize the traffic congestion in the public roads; and*

Driveway connectivity for the future extension of Caison Drive will be provided at the northern property line. There is an existing driveway permit for the project.

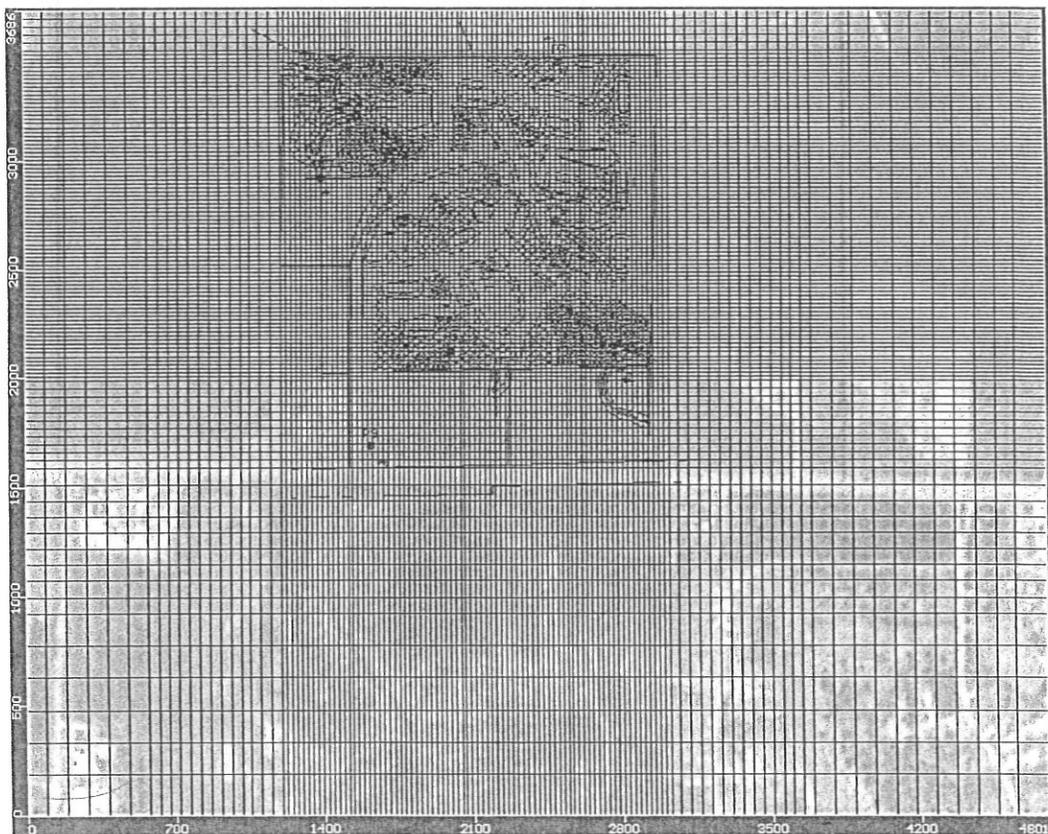
7. *That the special use shall, in all other respects, conform to the applicable regulations of the district in which it is located;*

Proposed improvements associated with the treatment facility will be compliant with all local, state, and federal regulations.

8. *The proposed use shall not adversely affect surrounding uses and shall be placed on a lot of sufficient size to satisfy the space requirements of said use.*

Due consideration has been given to soil characteristics, topography, and proximity to adjacent properties in determining the size and location of the site. State guidelines created to minimize impacts to adjacent properties and public health will be adhered to.

**Soils, Agronomic and Hydrogeologic Site Evaluation**  
**for the Hampstead Commons**  
**on Caison Drive, Hampstead**  
**Pender County, North Carolina**



June 2011

Prepared in Support of: Stroud Engineering PA

**EDWIN ANDREWS & ASSOCIATES, P. C.**  
CONSULTING HYDROGEOLOGY & SOIL SCIENCE  
P.O. BOX 30653  
RALEIGH, N.C. 27622

**EDWIN ANDREWS & ASSOCIATES, P.C.**  
CONSULTING HYDROGEOLOGISTS AND SOIL SCIENTISTS

P.O. BOX 30653  
RALEIGH, N.C. 27622 - 0653  
PHONE: (919) 783 - 8395  
FAX: (919) 783 - 0151

June 20, 2011

Mr. Luke Menius  
Stroud Engineering, PA  
102-D Cinema Drive  
Wilmington, NC 28403

Re: Submittal - Soils, Geologic and Agronomic Analysis - 15A NCAC 2T .0900  
56,000 gpd Water Reuses - Caison Drive Properties  
Project EEA RW 0510

Dear Mr. Menius:

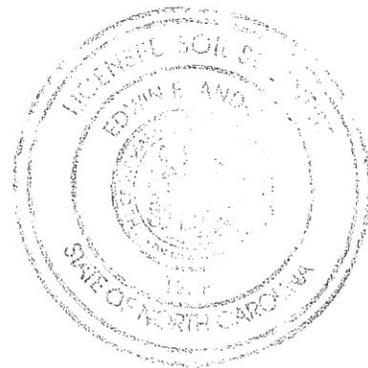
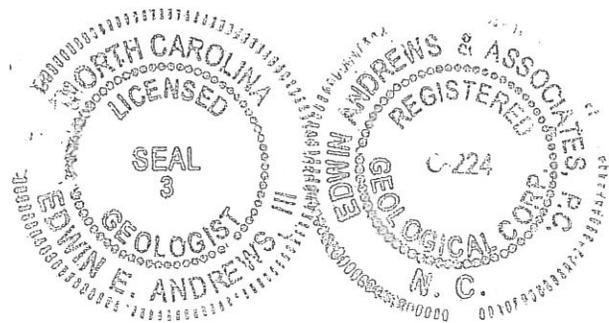
Attached is a Soil, Hydrogeologic and Agronomic analysis of 56,392 gallons per day water reuse evaluation. The model includes areas that were eliminated in the final evaluation because of the depth to seasonal high water table was too shallow in the areas mapped as Leon fine sand. This evaluation focuses on areas mapped as Kureb and Mandarin fine sand.

If you have any questions please contact my office.

Very truly yours,  
Edwin Andrews & Associates, P.C.

Edwin E. Andrews III, P.G., N.C.L.S.S.  
Consulting Hydrogeologist and Soil Scientist

encl.



## 6.0 CONCLUSIONS AND RECOMMENDATIONS:

### 6.1 CONCLUSIONS:

This analysis has evaluated the soils and hydrologic characteristics of Hampstead Commons Site at Caison Drive, Hampstead, North Carolina. The area calculations are only preliminary if the design loading volume selected by Stroud and Associates, PA is less, it is recommended to reduce irrigation areas of the Poorly Drained Mandarin soils. The actual loading requirements need to be refined by Stroud Engineering, PA. From the final area determinations, the loading and storage volumes should be adjusted. In order to predict the impacts of any discharges, assumptions are necessary. The specific nature of discharges, vertical leakage, the shape of discharges are several of the many assumptions that will alter the resultant ground water mound and vegetative up-take, due to the actual non-discharge system from the impact that is predicted in this report. The calculations in this analysis are necessarily conservative, however, additional conservative safeguards should be incorporated in the final design. Essentially, these safeguards should include landscaping and drainage improvements through the northern section of the site.

Generally, the Hampstead Commons Site at Caison Drive, Hampstead, North Carolina is suitable for land application using reclaimed water dispersed in small doses evenly between rainfall events (greater than 0.2 inch).

### 6.2 RECOMMENDATIONS:

The recommendations resulting from this analysis are summarized as follows:

- Use a loading rate 1.2 inches per week for all of the disposal in the woods and landscaped areas mapped as Excessively well drained Kureb fine sand, and 0.8 inch per week for all areas

mapped as Poorly Drained Mandarin;

- Use good agronomic practices such as soil testing, lime addition and soil amendment as needed;
- Irrigate at doses less than 0.2 inch per dose;
- Provide storage for 1,700,000 gallons or thirty days of the design flow which is expected to be less than 56,392 gallons per day;
- Provide phosphorous reduction 2 mg/l as determined in the agronomic analysis (Table 7A, Well Drained Soils).

In summary, the site can be used safely for a discharge of 40,383 gallons per day at a loading rate up to 1.2 inches per week on the Excessively Well Drained Kureb Soil; and 16,009 gallons per day at a loading rate of 0.8 in/wk on the Poorly Drained Mandarin Soils, using reclaimed water for a total of 56,392 gallons per day.

### 6.3 LIMITS OF INVESTIGATION:

Data presented in this investigative report represent isolated data points. Conclusions of this report, including maps, calculations and models, are based on extrapolations between data points and on subjective hydrogeologic, soils and geologic interpretation, therefore, may not be completely representative of all conditions in the study area.

Conclusions and recommendations of this report are based on best available data, collected within budgetary constraints of the original proposal. All modeling is a projection to provide bases for comparisons of design alternative. Modeling is not intended to provide prediction of future conditions. It is the premise of this effort that the information collected and analyzed is representative of a reasonable effort to understand and solve the existing problem. No guarantee is expressed or implied that new or additional data will not be required at a later time.

Submitted June 20, 2011

Edwin E. Andrews III, P.G., NCLSS  
Consulting Hydrogeologist and Soil Scientist for  
EDWIN ANDREWS & ASSOC., P.C.





<b>APPLICATION IDENTIFICATION</b>		<b>N.C. DEPARTMENT OF TRANSPORTATION STREET AND DRIVEWAY ACCESS PERMIT APPLICATION</b>
Driveway Permit No. <b>P-1045</b>	Date of Application 12-15-10	
County: <b>PENDER</b>		
Development Name: <b>CAISON DRIVE TURN LANE</b>		

**LOCATION OF PROPERTY:**

Route/Road: **US 17**

Exact Distance **1200**       Miles       Feet      **N S E W**

From the Intersection of Route No. **US 17** and Route No. **NCSR 1695** Toward **NCSR 1675**

DISTRICT 1  
DEC. 20 2010

Property Will Be Used For:  Residential /Subdivision     Commercial     Educational Facilities     TND     Emergency Services     Other Property:  
 is       is not      within      City Zoning Area.

**AGREEMENT**

- I, the undersigned property owner, request access and permission to construct driveway(s) or street(s) on public right-of-way at the above location.
- I agree to construct and maintain driveway(s) or street entrance(s) in absolute conformance with the current "Policy on Street and Driveway Access to North Carolina Highways" as adopted by the North Carolina Department of Transportation.
- I agree that no signs or objects will be placed on or over the public right-of-way other than those approved by NCDOT.
- I agree that the driveway(s) or street(s) will be constructed as shown on the attached plans.
- I agree that that driveway(s) or street(s) as used in this agreement include any approach tapers, storage lanes or speed change lanes as deemed necessary.
- I agree that if any future improvements to the roadway become necessary, the portion of driveway(s) or street(s) located on public right-of-way will be considered the property of the North Carolina Department of Transportation, and I will not be entitled to reimbursement or have any claim for present expenditures for driveway or street construction.
- I agree that this permit becomes void if construction of driveway(s) or street(s) is not completed within the time specified by the "Policy on Street and Driveway Access to North Carolina Highways".
- I agree to pay a \$50 construction inspection fee. Make checks payable to NCDOT. This fee will be reimbursed if application is denied.
- I agree to construct and maintain the driveway(s) or street(s) in a safe manner so as not to interfere with or endanger the public travel.
- I agree to provide during construction proper signs, signal lights, flaggers and other warning devices for the protection of traffic in conformance with the current "Manual on Uniform Traffic Control Devices for Streets and Highways" and Amendments or Supplements thereto. Information as to the above rules and regulations may be obtained from the District Engineer.
- I agree to indemnify and save harmless the North Carolina Department of Transportation from all damages and claims for damage that may arise by reason of this construction.
- I agree that the North Carolina Department of Transportation will assume no responsibility for any damages that may be caused to such facilities, within the highway right-of-way limits, in carrying out its construction.
- I agree to provide a Performance and Indemnity Bond in the amount specified by the Division of Highways for any construction proposed on the State Highway system.
- The granting of this permit is subject to the regulatory powers of the NC Department of Transportation as provided by law and as set forth in the N.C. Policy on Driveways and shall not be construed as a contract access point.
- **I AGREE TO NOTIFY THE DISTRICT ENGINEER WHEN THE PROPOSED WORK BEGINS AND WHEN IT IS COMPLETED.**

150239-47900022-3:10711-3846 P-1045









North Carolina Department of Environment and Natural Resources

Division of Water Quality

Beverly Eaves Perdue  
Governor

Coleen H. Sullins  
Director

Dee Freeman  
Secretary

February 14, 2011

Mark Maynard, Manager  
Caison Drive Properties, LLC  
1510 South Third Street  
Wilmington, NC 28401

**Subject: Permit No. SW8 101014  
Caison Drive Apartments  
Low Density Stormwater Project  
Pender County**

Dear Mr. Maynard:

The Wilmington Regional Office received a complete Stormwater Management Permit Application for Caison Drive Apartments on January 3, 2011. Staff review of the plans and specifications has determined that the project, as proposed, will comply with the Stormwater Regulations set forth in Session Law 2008-211 and Title 15A NCAC 2H.1000. We are forwarding Permit No. SW8 101014 dated February 14, 2011, for the construction of the subject project.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the conditions and limitations as specified therein, and does not supercede any other agency permit that may be required.

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing upon written request within thirty (30) days following receipt of this permit. This request must be in the form of a written petition, conforming to Chapter 150B of the North Carolina General Statutes, and filed with the Office of Administrative Hearings, P.O. Drawer 27447, Raleigh, NC 27611-7447. Unless such demands are made this permit shall be final and binding.

If you have any questions, or need additional information concerning this matter, please contact either Chris Baker or me at (910) 796-7215.

Sincerely,

Georgette Scott  
Stormwater Supervisor  
Division of Water Quality

GDS/csb: S:\WQS\STORMWATER\PERMITS&PROJECTS\2010\101014 LD\2011 02 permit 101014  
cc: David L. Menius, P. E., Stroud Engineering, P. A.  
Pender County Inspections  
Wilmington Regional Office



PW-615 permits  
Caison Public ATC

North Carolina Department of Environment and Natural Resources  
Division of Water Resources

Beverly Eaves Perdue  
Governor

Thomas A. Reeder  
Director

Dee Freeman  
Secretary

September 15, 2011

MICHAEL G MACK  
P O BOX 995  
BURGAW, NC 28425

Re: **Authorization to Construct**  
CAISON DRIVE  
ROCKY PT/TOPSAIL W & S DIST  
PENDER COUNTY, NC7071011

**Authorization to Construct (This is not a Final Approval)**

Dear Applicant:

This letter is to confirm that a complete Engineer's Report and a Water System Management Plan have been received, and that engineering plans and specifications have been approved by the Department for **CAISON DRIVE, Serial No. 11-00795**.

The Authorization to Construct is valid for 24 months from the **Issue Date** (refer to next page). Authorization to Construct may be extended if the Rules Governing Public Water Supplies and site conditions have not changed (see Rule .0305). The Authorization to Construct and the engineering plans and specifications approval letter shall be posted at the primary entrance of the job site before and during construction.

Upon completion of the construction or modification, and prior to **placing the new construction or modification into service**, the applicant must submit an Engineer's Certification and Applicant Certification directly to SIRAJ CHOCHAN, P.E. of this office.

- **Engineer Certification:** in accordance with Rule .0303 (a), the applicant shall submit a certification statement signed and sealed by a registered professional engineer stating that construction was completed in accordance with approved engineering plans and specifications, including any provisions stipulated in the Department's engineering plan and specification approval letter.
- **Applicant Certification:** in accordance with Rule .0303 (c), the applicant shall submit a signed certification statement indicating that the requirements for an Operation and Maintenance Plan and Emergency Management Plan have been satisfied in accordance with Rule .0307 (d) and (e) and that the system has a certified operator in accordance with Rule .1300. The "Applicant Certification" form is available at <http://www.deh.enr.state.nc.us/pws/> (click on Plan Review Forms, under Plan Review heading).

If this Authorization to Construct is for a new public water system, the owner must submit a completed **application for an Operating Permit** and the appropriate fee. For a copy of the application for an Operating Permit please call (919) 715-3214.

Once the certifications and permit application and fee, (if applicable), are received and determined adequate, the Department will issue a Final Approval letter to the applicant. In accordance with Rule .0309 (a), **no portion of this project shall be placed into service until the Department has issued Final Approval.**

If the Public Water Supply Section can be of further assistance, please call (919) 733-2321.

Sincerely,

J. Wayne Munden, P.E., Head  
Technical Services Branch

cc: Debra Benoy, P.E., REGIONAL ENGINEER  
STROUD ENGINEERING PA-WILMINGTON