Pender County
Planning and Community Development

Planning Division
805 S. Walker Street
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AGENDA
Pender County Planning Board Meeting
Tuesday, December 7, 2010 7:00 p.m.
Pender County Public Meeting Room
805 S. Walker Street, Burgaw, North Carolina

Call to Order: Chairman Reynolds

Roll Call: Chairman Reynolds
Pender County Planning Board Members:
Reynolds: ____ Garrett: ____ Boney: ____ Marshburn: ____ Millette: ____ Smith: ____ Williams: _____

1. **Adoption of the Agenda**

2. **Approval of Minutes: November 3, 2010**

3. **Public Comment**

(Public Hearing)

4. **Master Development Plan review: Planned Development District Hawksbill Cove**
(FKA St. George's Reach) - Hampstead Properties, LLC, applicant, on behalf of GF Management Co., LLC and Hampstead Properties, LLC, owner, is requesting approval of a master plan revision for Hawksbill Cove, formerly known as St. George's Reach. The proposal consists of the relocation of the previously approved connector road and associated revisions affecting approximately 13 acres. The property is located south of Country Club Drive, running south to the Atlantic Intracoastal Waterway and is bounded by Belvedere Plantation to the northeast and Hideaway Shores to the southeast. The proposed connector road intersects Country Club Drive and connects to Transfer Station Road. The property is located in Hampstead, NC and is zoned PD, Planned Development.

5. **Discussion Items**
   a. Planning Staff
   b. Planning Board Members

6. **Adjournment**

Hgenda

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MEMORANDUM

To: Pender County Planning Board

From: Pender County Planning Staff

Date: December 7, 2010

RE: Hawksbill Cove Hearing

Pursuant to the motion at the Planning Board hearing on July 6, 2010, the applicant has furnished responses to concerns raised during the July 6 discussion regarding the revision to Hawksbill Cove.

At the conclusion of this hearing, staff was directed to compile a comprehensive list of development concerns raised at this discussion to forward to the applicant for their clarification. After the Planning Board's consent to the list, it was forwarded to the developer on July 7, 2010. A subsequent list was forwarded to the developer by staff on July 15, 2010.

The developer has submitted a packet with written responses to these questions, as well as more detailed responses to an initial list of development concerns furnished by the Technical Review Committee and staff on June 4, 2010, in order to comply with the Planning Board motion from July 6.

One of these concerns dealt with the relocation of the Pender County transfer station to accommodate the location of the proposed connector road. The development team, along with county personnel, agreed upon a conceptual proposal that would relocate the transfer station scales and scale house out of the public right-of-way and provide no disruption to the County's waste management services, with all costs being incurred by the development team. The development team then held two public meetings to address concerns with the community on November 4 and 12, 2010. At the November 15, 2010 Board of Commissioners meeting, the Board unanimously approved a motion consenting to the proposed relocation. Staff will continue to work with the development team on the specific details of the relocation.

A package containing a revised master plan, responses to the initial list of development concerns, and several supporting exhibits is included for the Planning Board's review and discussion for the December 7 agenda.

HAWKSBILL COVE

LIST OF ITEMS TO ADDRESS FOR PLANNING BOARD
(3 LISTS FROM COUNTY)

A.

QUESTIONS/COMMENTS FROM JULY 15, 2010 E-MAIL FROM COUNTY PLANNING BOARD and OUR RESPONSES

Hawksbill Cove Master Plan
Comments from Planning Board – (emailed from Staff July 15, 2010)

A1. We need all TRC and staff questions answered more clearly.

RESPONSE: See Sections B and C below for clearer responses.

A2. Note on master plan that connector road will be built and binder layer of asphalt before any construction begins in main dev. This means not even street work.

RESPONSE: See Note #7 under Development Notes.

A3. Make arrangement with county about transfer station and stacking lane. (need written agreement from county prior to meeting)

RESPONSE: The transfer station will be heard as an action item at the BOCC meeting on September 20, 2010. See attached Exhibit B dated August 11, 2010 and Exhibit D: Traffic Assessment prepared by Ramey Kemp & Associates dated August 23, 2010.

A4. Show water plant location or use of county water. (need to decide on one or other)

RESPONSE: Developer intends to use County water. Discussions are underway with Pender County regarding availability and availability timing. See attached Exhibit F: letter from Michael Mack dated September 9, 2010.

A5. Show location of sewer plant and effluent pond locations and size.

CLARIFICATION FROM BOARD: An 81/2 x 11 supplemental sketch of the site for the sewer plan will be asked to be provided along with the area calculations of the proposed effluent ponds associated with the plant.

RESPONSE: See attached Exhibit A dated August 17, 2010 and Exhibit E: letter from Applied Resources Management, PC dated September 7, 2010.

A6. All buffers clearly marked with size and location.

CLARIFICATION FROM BOARD: Make sure the perimeter buffers are all marked and noted.

RESPONSE: Perimeter buffers have been identified on the master plan. Also see Note #4 under the Development Notes.

A7. Need to see difference in edge lots that were supposed to be larger, some areas seem to have been deleted.

RESPONSE: Some edge lots have been replaced with open space but the number of units in the table has not changed. Some roads have been realigned as well to reflect NCDOT standards. If one compares the old master plan with the new master plan, one will see a difference, but the numbers have not changed except for the reduction of 45 residential units (Bruton Tract).

A8. Would like to see interconnectivity with aquatic center road.

RESPONSE: Area of connectivity has been identified on the master plan to allow flexibility for the aquatic center to make connection.

A9. Show active and passive open space with effluent ponds removed.

CLARIFICATION FROM BOARD: This may have been a mixed comment from the Board in that they could have been referencing the UDO which is not in effect for this project.

RESPONSE: The approximate active and passive open space areas are 28 and 92 acres respectively. The effluent pond area is 5.33 acres. If effluent pond area removed, passive open space area would be 86.67 acres.

A10. Show area for amenities.

CLARIFICATION FROM BOARD: This is in reference of a mathematical calculation and clear delineation on the plan for all amenity areas.

RESPONSE: A ±4.0 acre neighborhood recreation amenity area is shown on the master plan.

A11. Would like to see preliminary phasing plan.

CLARIFICATION BY BOARD: As discussed in the meeting August 2, 2010, some sort of phased outline is requested and may be in coordination with public water supply. This may be achievable through written narrative.

RESPONSE: A written narrative of phasing is provided in note #10 under Development Notes.

A12. Need to see exactly where multi family, commercial and single family will be located.

CLARIFICATION BY BOARD: Once again, as discussed in the 8/2 meeting, showing the location of where residential will not be may be sufficient. Try to show where the more and less intense density areas will be located.

RESPONSE: The Proposed Land Uses Legend on the master plan identifies the locations of multi-family and commercial uses.

A13. Redo density calculation and correct mistakes with no more density than was originally allowed on site without connector road included.

RESPONSE: The development density with respect to units and square footage shown for this portion of the site indicates no additional units than the previously approved master plan. The density (45 residential units; 200,000 square foot commercial / office & retail space; 60,000 square foot civic & recreation area) located on the previously approved master plan connector road has been completely removed from this application. 45 residential units (Bruton Tract) and 1105 residential units on the main tract were provided on the previously approved master plan. The 45 residential units (Bruton Tract) have been removed and the 1105 residential units remain on the main tract with this application. Also, mathematical errors have been corrected in the table.

A14. Make note on plan if inland marina is not state approved they cannot come back and add further development (will need to be marked as no development).

RESPONSE: A note has been added to the existing note in the upper right side of the master plan stating *If a marina (as defined in the Pender County Zoning Ordinance dated 09/18/06) is not state approved, no further residential or commercial density shall be added.*

NOTE FROM BOARD: Please clarify housing units and that the removed mixed use units on the original approved MP have not been adjusted into the revised MP area.

RESPONSE: 45 residential units (Bruton Tract) and 1105 residential units on the main tract were provided on the previously approved master plan. The 45 residential units (Bruton Tract) have been removed and the 1105 residential units remain on the main tract with this application.

B.

QUESTIONS/COMMENTS FROM JULY 6, 2010 E-MAIL FROM COUNTY REGARDING PLANNING BOARD REQUESTS AND OUR RESPONSES

Hawksbill Cove Master Plan Hearing
July 6, 2010
Development Issues – PRELIMINARY

B1. Correct calculations for multi-family and single-family housing units.

RESPONSE: Calculations for multi-family and single-family housing units have been corrected to match the previously approved master plan dated March 18, 2008 and on file at Pender County Planning. The calculation reflects removal of the "Bruton Tract" between Country Club Drive and US Hwy 17 and the removal of the forty-five (45) units previously located on the "Bruton Tract". Also, mathematical errors have been corrected in the table.

B2. Correct buffer width to 60' adjacent to Sound View Drive.

RESPONSE: The buffer separating the village area from Sound View Drive has been changed to 60' as identified in the previous master plan approval letter dated November 8, 2007.

B3. Clarify source of water (either public or provided by developer). Illustrate location of water plant if one is to be constructed by the developer onsite.

RESPONSE: Developer intends to use County water. Discussions are underway with Pender County regarding availability and availability timing. See attached letter from Michael Mack dated September 9, 2010.

What is the necessary capacity to adequately serve the development?

RESPONSE: ±415,000 gallons per day. Availability coordination with Michael Mack is onging.

B4. Provide more information on relocation of transfer station.

RESPONSE: The transfer station will be heard as an action item at the BOCC meeting on September 20, 2010. See attached Exhibit B dated August 11, 2010 and Exhibit D: Traffic Assessment prepared by Ramey Kemp & Associates dated August 23, 2010.

Specifically, how will truck traffic be accommodated and stacked?

RESPONSE: The entrance has been located to accommodate better flexibility and a longer entrance drive to accommodate stacking on site as opposed to stacking within public right-of-way as it does today. See attached Exhibit B.

B5. Issues with inland lake/marina.

RESPONSE: A note has been added to the existing note in the upper right side of the master plan stating *If a marina (as defined in the Pender County Zoning Ordinance dated 09/18/06) is not state approved, no further residential or commercial density shall be added.*

B6. Recommend connections to Sound View Drive and Scotch Bonnet Lane.

RESPONSE: Connection to Scotch Bonnet & Soundview Drives has been provided.

B7. Correct density calculations to illustrate no increase in density will take place as a result of revision.

RESPONSE: The development density with respect to units and square footage shown for this portion of the site indicates no additional units than the previously approved master plan. The density (45 residential units; 200,000 square foot commercial / office & retail space; 60,000 square foot civic & recreation area) located on the previously approved master plan connector road has been completely removed from this application. 45 residential units (Bruton Tract) and 1105 residential units on the main tract were provided on the previously approved master plan. The 45 residential units (Bruton Tract) have been removed and the 1105 residential units remain on the main tract with this application. Also, mathematical errors have been corrected on the table.

B8. Address drainage issues to adjacent subdivisions and road crossings.

RESPONSE: The site will include onsite stormwater management and BMP facilities designed to control stormwater / flooding to meet county and state stormwater requirements which will provide no increase in stormwater runoff from the site for the required design storms. See Note #8 under Development Notes.

B9. Clarify stormwater management methods and treated effluent locations.

RESPONSE: Stormwater management will include a combination of Best Management Practices (BMPs) such as wet ponds, rain gardens, infiltration devices, etc. The Proposed Land Uses legend has been updated to include stormwater and wastewater effluent areas. See Note #8 under Development Notes.

What are the size and locations of retention ponds?

RESPONSE: Final sizing of the stormwater facilities are subject to more detailed design. Approximate size and location of facilities have been identified. Additional facilities may be added as final design is complete and permitted.

B10. Can conditional approval proceed if initial master plan approval was contingent on the connector road being located on the Bruton property?

RESPONSE: We understand that Trey Thurman addressed this at the Planning Board meeting on July 6, 2010.

B11. Illustrate bicycle facilities on road cross section.

RESPONSE: See attached Exhibit C.

B12. Provide more detail of buffer adjacent to Hideaway Shores. Should this detail be expanded to include buffers to all adjacent boundaries?

RESPONSE: A 30' buffer is provided adjacent to Hideaway Shores with the exception of a 10-20' buffer adjacent to Lot 1 due to area limitations stemmed from the county's request to interconnect Scotch Bonnet Way. 10' is the minimum required buffer width. All buffers will comply with the Pender County Zoning Ordinance dated 09/18/06 as to what plant material is required.

C.

QUESTIONS/COMMENTS FROM JUNE 4, 2010 E-MAIL FROM TRC and OUR RESPONSES

Pender County Planning Staff
Preliminary Review Comments
Hawksbill Cove
June 4, 2010
Street Issues:

C1. Are streets proposed to be public or private, or a mix as was previously approved?

RESPONSE: A mix, as previously approved. All roads will be designed to NCDOT standards. Currently, we have shown on the Master Plan in "yellow" the public roads.

If a mix, what roads are to be dedicated as public?

RESPONSE: At a minimum, the public access road (spine road) and Transfer Station Road will be public. Market conditions will dictate private / public; however all roads are designed to NCDOT standards as required by the Pender County Zoning Ordinance, therefore, any roadway could be dedicated as public if necessary.

If private, are ROW widths sufficient to meet NCDOT standards?

RESPONSE: Yes.

We recommend (again) connections to Soundview Lane and Scotch Bonnett/Sand Dollar Lane. Such connections are supported by appropriate ordinance sections and plans.

RESPONSE: Connection to Scotch Bonnet & Soundview Drives has been provided.

C2. Are any bicycle/pedestrian facilities proposed?

RESPONSE: Yes, trails and sidewalks will be provided throughout the development east of Country Club Drive.

A bike/ped facility is recommended along the connector road, including along any required improvements from Transfer Station Road to Hwy 17.

RESPONSE: Due to the inability of the Developer to construct the bike lane along the existing portion of Transfer Station Road, because of stormwater permitting issues and lack of ownership of land, the Developer will offer a "payment in lieu of construction" to the County in the amount of $62,500 (estimated to be $25 per square yard for concrete: 4,500 feet x 5 feet = 22,500 sq. ft. = 2,500 sq. yd.).

Also, a bike/ped facility is recommended along the length of the main public access road, including along the connections to Sound View Drive and Scotch Bonnet Lane, consistent with the Coastal Pender Collector Street Plan and the draft Cape Fear Commutes 2035 Plan.

RESPONSE: See attached Exhibit C.

Is 60' R/W width for Transfer Station Road and connection sufficient?

RESPONSE: Yes.

C3. What is the status of a revised TIA for the development given the new location of connector road?

RESPONSE: The TIA was submitted to Robert Vause of NCDOT on July 21, 2010 and e-mailed to Ken Vafier of the County on July 30, 2010. NCDOT Congestion Management has reviewed the updated TIA and provided comments to Robert Vause for his review. We expect a final list of comments within the next couple of weeks (mid to late September).

C4. Please add typical road sections for each road type.

RESPONSE: See attached Exhibit C.

C5. Has interconnectivity to the previously approved Dolphin Aquatics Fitness Center development been considered?

RESPONSE: An area of interconnectivity has been identified on the master plan.

We recommend the proposed R/W be directly adjacent to the adjoining property or show/reserve R/W stubs to adjoining property.

RESPONSE: An area of interconnectivity has been identified on the master plan.

WWTP/Utilities:

C6. Is the area shown on the plan sufficient for the WWTP structure as well as associated treatment areas?

RESPONSE: Yes.

Will the WWTP serve only this development?

RESPONSE: Yes.

Does the area incorporate required buffers to adjacent developed areas?

RESPONSE: Yes. See attached Exhibit A.

C7. Please add a note that a separate SUP will be required for the WWTP.

RESPONSE: See Note #8 under Development Notes.

C8. Clarify note "waste collection will be by private contractor through the HOA if public sewer not available." Is this a typo in reference to garbage collection or wastewater collection?

RESPONSE: Yes, this is a typo. See Note #8 under Development Notes.

C9. Is water service still to be provided solely by developer as indicated on the plan?

RESPONSE: No, developer intends to use County water. Discussions are underway with Pender County regarding availability and availability timing. See attached Exhibit F: letter from Michael Mack dated September 9, 2010.

Has any preliminary engineering or design been done on this? **N/A**
Where on the site will this be located? **N/A**

Open Space/Amenities:

C10. How much of the 76 acres of open space acres are wetlands, stormwater ponds, lakes, etc. and how much of this area is "usable" open space (or areas not in wetlands or stormwater ponds)?

RESPONSE: Open space provided has been revised from 76 acres to 120 acres. The approximate active and passive open space areas are 28 and 92 acres respectively.

C11. Are there any major recreation amenities proposed, such as a neighborhood park, athletic fields, pavilion, etc?

RESPONSE: An area has been identified on the master plan. See Note #4 under Development Notes.

What will those amenities be?

RESPONSE: At a minimum, a pool, clubhouse and multi-purpose court.

C12. When will the amenities be constructed (phasing)?

RESPONSE: Phase 1. See Note #10 under Development Notes.

C13. What other amenities are proposed and where are they located?

RESPONSE: The amenities are located in the central area of the site as identified on the master plan.

Are these areas publicly accessible?

RESPONSE: The onsite amenities are for the use of Hawksbill Cove development.

C14. Are any areas being reserved or offered for public/quasi-public agencies?

RESPONSE: At this time, the only areas to be offered or reserved for public/quasi-public agencies are roads and utilities.

Other/Misc.:

C15. For net density calculation, what uses are being removed from "Other uses acreage?" Is this calculation in keeping with the subdivision ordinance definition of net density?

RESPONSE: Net density is per the *Pender County Subdivision Ordinance*. The uses being removed are: required open space, public road rights-of-way, private alleys (access to parking), wetlands, hydric soils (as defined in the Pender County Zoning Ordinance dated 09/18/06), 100-yr. flood zone and Areas of Environmental Concern.

C16. Is inland lake/marina area now being proposed for approval?

RESPONSE: Yes, for a master plan level of detail only and subject to further processes.

Previously it was "grayed out" of the master plan.

RESPONSE: The inland lake/marina was not "grayed out" of the master plan. The inland lake/marina area was specifically excluded from the Preliminary Plan submission as it was identified simply as future development and subject to a future Preliminary Plan submission and state and local permitting.

C17. What is the status of discussion with appropriate permitting agencies regarding the inland lake/marina?

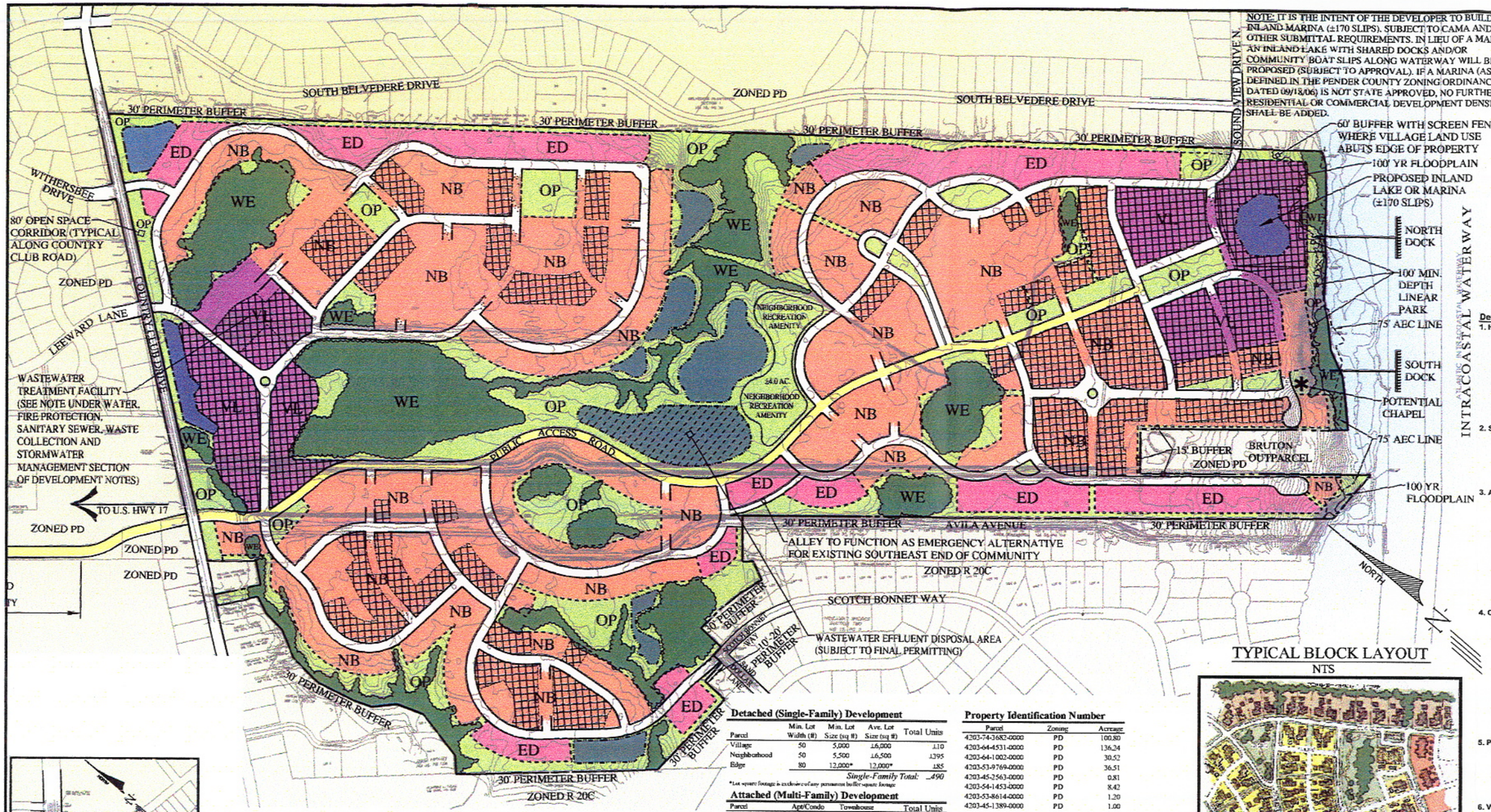
RESPONSE: A permit application has not been filed.

C18. What is the status regarding any agreement with Pender County on movement of the scales on Transfer Station Road and any other issues regarding this connection?

RESPONSE: The transfer station will be heard as an action item at the BOCC meeting on September 20, 2010. See attached Exhibit B dated August 11, 2010 and Exhibit D: Traffic Assessment prepared by Ramey Kemp & Associates dated August 23, 2010.

C19. Is there a phasing plan/buildout schedule for the project?

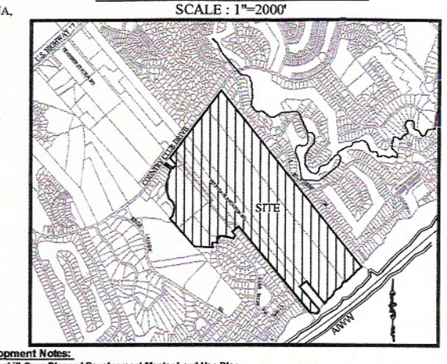
RESPONSE: See Note #10 under the Development Notes.

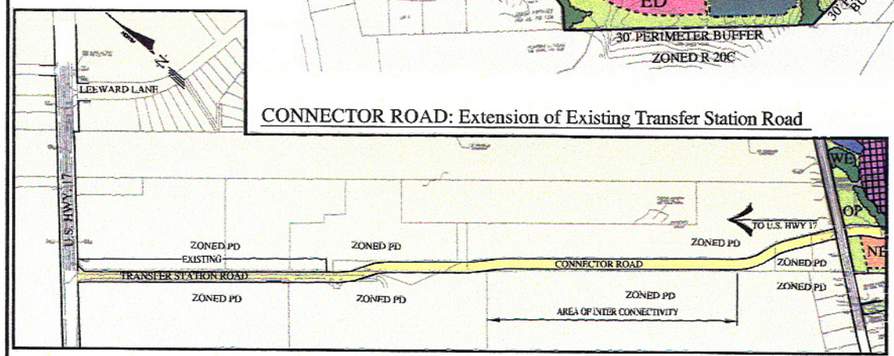


NOTE: IT IS THE INTENT OF THE DEVELOPER TO BUILD AN INLAND MARINA (±170 SLIPS), SUBJECT TO CAMA AND OTHER SUBMITTAL REQUIREMENTS. IN LIEU OF A MARINA, AN INLAND LAKE WITH SHARED DOCKS AND/OR COMMUNITY BOAT SLIPS ALONG WATERWAY WILL BE PROPOSED (SUBJECT TO APPROVAL). IF A MARINA (AS DEFINED IN THE PENDER COUNTY ZONING ORDINANCE DATED 09/18/06) IS NOT STATE APPROVED, NO FURTHER RESIDENTIAL OR COMMERCIAL DEVELOPMENT DENSITY SHALL BE ADDED.

PROJECT VICINITY MAP

SCALE : 1"=2000'

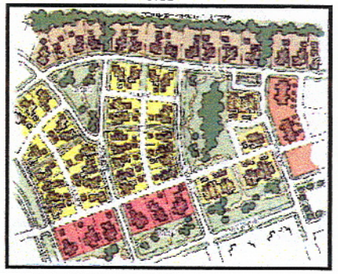




CONNECTOR ROAD: Extension of Existing Transfer Station Road

TYPICAL BLOCK LAYOUT

NTS



Detached (Single-Family) Development

Parcel	Min. Lot Width (ft)	Min. Lot Size (sq ft)	Ave. Lot Size (sq ft)	Total Units
Village	50	5,000	±6,000	±10
Neighborhood	50	5,500	±6,500	±395
Edge	80	12,000*	12,000*	±85
			Single-Family Total:	*±490*

*Lot square footage is exclusive of any permanent buffer square footage

Attached (Multi-Family) Development

Parcel	Apt/Condo	Townhouse	Total Units
Village	±250		±195
Neighborhood	±230	±190	±420
Edge	0	0	0
		Multi-Family Total:	*±615*

Commercial / Office & Retail Space

Parcel	Square Footage
Village	±50,000
Neighborhood	0
Edge	0
	Total: ±50,000

Civic & Recreational

(Examples: Fire Station, Automatic, Post Office, Sales Center, Chapel, Park Pavilions, Kiosks, Community Center, Clubhouse, Library, Educational Uses, etc.)

Parcel	Square Footage
Village	±22,000
Neighborhood	±6,000
Edge	±2,000
Parks & Open Space	±30,000
	Total: ±60,000

Other Uses

Use	Acreage
Open Space Provided / Required	±120 / 56
Public Road Rights-of-Way	±58
Private Alleys (access to parking)	±11
Wetlands	±43
Hydric Soils**	±11
100-yr Flood Zone	±2
Area of Environmental Concern (AEC)	±0.2
	Total: ±181.2

Property Identification Number

Parcel	Zoning	Acreage
4203-74-3682-0000	PD	100.80
4203-64-4531-0000	PD	136.24
4203-64-1002-0000	PD	30.52
4203-53-9769-0000	PD	36.51
4203-45-2563-0000	PD	0.81
4203-54-1453-0000	PD	8.42
4203-53-8614-0000	PD	1.20
4203-45-1389-0000	PD	1.00
4203-45-4049-0000	PD	1.00
4203-44-8578-0000	PD	2.85
4203-53-9319-0000	PD	1.10
4203-43-7857-0000	PD	54.85

Development Summary

Land Use Parcel	Acreage
Village (VL)	±24
Neighborhood (NB)	±144
Edge (ED)	±31
Other Uses	±177
	Total: ±376

Housing Summary

Product Type	Percentage of Total	Number of Units
Single-Family Residential	±44%	±490
Multi-Family Residential	±56%	±615
		Total: ±1105

Density Calculations

Units	1105
Gross Acreage	±376
Other Uses Acreage	±181.2
Net Acreage*	±194.8
Gross Density	±2.94 du/ac
Net Density*	±5.67 du/ac

*Calculation per Density Standards Table of the Pender County Master Plan Review Check List

**As defined in Pender County Zoning Ordinance dated 09/18/06

PROPOSED LAND USES

- VL — VILLAGE
- NB — NEIGHBORHOOD
- ED — EDGE
- OP — OPEN / GREEN SPACE
- WE — WETLAND / PRESERVED LANDS
- PUBLIC ROAD
- STORMWATER POND / LAKE
- WASTEWATER EFFLUENT DISPOSAL AREA
- VL — COMMERCIAL/ MULTI-FAMILY
- NB — MULTI-FAMILY

Development Notes:

1. **Hawksbill Cove Planned Development Master Land Use Plan**
   The Master Land Use Plan for Hawksbill Cove is conceptual in nature and is an approximate representation of potential land uses, sizes, locations, and circulation patterns. The plan is intended to be developed in phases over a period of time and should maintain flexibility to accommodate specific site conditions, environmental concerns, design parameters and economic changes in the market. The Planned Development Master Land Use Plan will be used during the review in accordance with Section 17 of the Pender County Zoning Ordinance. The mixed-uses and neighborhood locations, entrance locations, site data, acreage and density allocations, street alignment shown on the Planned Development Master Land Use Plan are subject to change pending detailed design and other constraints as noted herein. The open space, amenities, and other common area properties will be owned and maintained by the developer, property owner's association, or other legally designated entity.
2. **Site Boundary, Acreage & Zoning**
   The property boundary information and overall acreage's are referenced from survey information provided by Southwind Surveying. The ±376-acre property is located along Country Club Road, adjacent to the southern boundary of Belvedere and extends from the Intracoastal Waterway to Country Club Road and portions west toward US Hwy 17. The property is currently zoned PD and is bordered by PD and R 20C zoned land uses. The proposed Master Land Use Plan is in conformance with Pender County's Future Land Use Map for designated Urban Growth Areas.
3. **Architectural and Development Character**
   Through architectural guidelines, Hawksbill Cove will promote a traditional village style of development typified by the culture, value and traditions exemplified by the historical districts of North Carolina Coastal Communities such as Beaufort, Swansboro, New Bern, and other coastal communities. This development is to resemble the coastal village style which is characterized by a pedestrian-friendly environment of loosely laid gridded like streets (alleys where appropriate), neighborhood parks, walkways, front porches, mixed uses and a unifying quaint scale. Homes within the neighborhood are planned to be within easy walking distance of the parks, recreation area, civic and other community features. The village character like other traditional neighborhoods will be a mixed-use development consisting of potential neighborhood commercial uses (such as live/work units), single-family residential (including zero lot lines), multi-family residential (including attached town homes, apartments and condominium ownership), recreational, civic uses and open space. The distinct features of the design guidelines and locations of proposed buildings will be referenced in the Preliminary Site Plan Presentation as identified in Step II of the Planned Development process.
4. **Open Space / Greenways / Buffers**
   Open space, greenways, buffers, community parks and lakes are conceptual and intended to represent an overall system of natural preserves, wildlife and aquatic habitats, protected view sheds, accessible neighborhood parks and a healthy lifestyle of outdoor passive and recreational activities (such as fishing, swimming, tennis, fitness, public gatherings, garden plots, etc). Actual location of these areas may change with specific site conditions, phasing implementation, and as other development features, such as storm drainage, utilities, buffers, possible wastewater treatment plant, wetland areas are better defined. Buffers shall meet the minimum requirement as defined by the Pender County regulations and shall pertain to the perimeter of the Planned Development only. Unless otherwise stated, the perimeter boundary shall have a 30 foot buffer. Property lines of individual lots may also extend into the buffer areas as long as an appropriate easement is established. A total open space has been calculated based on an overall Planned Development system and not on a site-specific basis for each potential phase nor individual development or project. Open space includes neighborhood parks, recreational areas, natural areas, community gardens, sidewalks, accessible easements, trails, buffer zones, and the like.
5. **Pedestrian Circulation**
   Trails and sidewalks will provide pedestrian connections between neighborhoods and villages, promoting a pedestrian friendly environment. Sidewalks and street trees will be located on one or both sides of streets where appropriate as in higher density areas and where trails or pathways are unavailable. Where appropriate, pedestrian surfaces may be paved with natural materials and pervious surfaces to minimize environmental impacts and to blend with the natural characteristics of the area. Sidewalk and trail locations will be subject to actual site conditions, natural features and approvals of actual phased development plans.
6. **Vehicular Circulation**
   Based on confirmation of distances, site specifics and coordination with transportation engineers, the proposed access point locations as shown on the Master Land Use Plan are preliminary and may be relocated prior to final development plan approval. All roadway, street systems and service alleys are considered to be preliminary and need to be verified for compliance with NCDOT. Road circulation patterns and connections are considered conceptual and subject to change based on phased development refinement, as well as agency input and reviews. Locations for parking facilities and refinements to circulation will be referenced on the Preliminary Site Plan Presentation in Step II of the Planned Development submittal process.
7. **Connector Road**
   An asphalt binder base over rock must be completed on the connector road prior to any construction activity east of Country Club Drive. Connector road shall be complete during Phase 1.
8. **Water, Fire Protection, Sanitary Sewer, Waste Collection and Stormwater Management**
   Water service will be provided by Pender County with phasing subject to water availability. Fire lines will be constructed by the developer and will provide the necessary fire flows per Pender County fire code requirements and other local, state, and federal regulations. Sanitary sewer service will be provided onsite and managed by a regulated operator if public sewer is not available. Planning and design for the sanitary sewer system will commence with preparation of phased development permit plans. A wastewater treatment plant site and effluent disposal area have been identified on this plan. The wastewater treatment plant is subject to a Special Use Permit and other local, state, and federal permits. If an offsite wastewater treatment plant / facility is utilized in the future, no additional density will be added and the underlying land use identified hereon shall apply. Solid waste (trash) collection will be provided by private contractor through the Home Owners Association. The site will include onsite stormwater management and BMP facilities designed to control stormwater / flooding to meet county and state stormwater requirements which will provide no increase in stormwater runoff from the site for the required design storms.
9. **Onsite Environmental Information**
   Wetland information is based on field delineations by Applied Resource Management and survey mapping by Southwind Surveying. FEMA flood and AEC information is based on latest official maps and guidelines. Preliminary plan and permit submittals will reflect actual agency certified delineations and other criteria as required under Pender County's plat and subdivision guidelines.
10. **Phasing**
    Phase 1: connector road (see note #7), waterline extension to site, public access road (spine road), ±4.0 ac. neighborhood recreation amenity, 200 residential units, WWTP or offsite sewer extensions if public sewer available.
    Phase 2: additional 200 residential units (total of 400 units),
    50,000 square feet commercial / office & retail,
    60,000 square feet civic & recreational
    Phase 3: additional 300 residential units (total of 700 units)
    Phase 4: additional 405 residential units (total of 1105 units)

Hawksbill COVE

PENDER COUNTY, NORTH CAROLINA
SEPTEMBER 10, 2010

PLANNED DEVELOPMENT MASTER PLAN (REVISION)

0 200' 400' 800' 1,600'

Scale: 1"=400'

urban
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Urban, Ltd.
NC License No. P-0526
108 North Kerr Avenue, Suite K-1
Wilmington, NC 28405
Tel. 910.395.1655
www.urban-ltd.com

HAWKSBILL COVE

LIST OF EXHIBITS

Exhibit A: Hawksbill Cove WWTP dated August 17, 2010

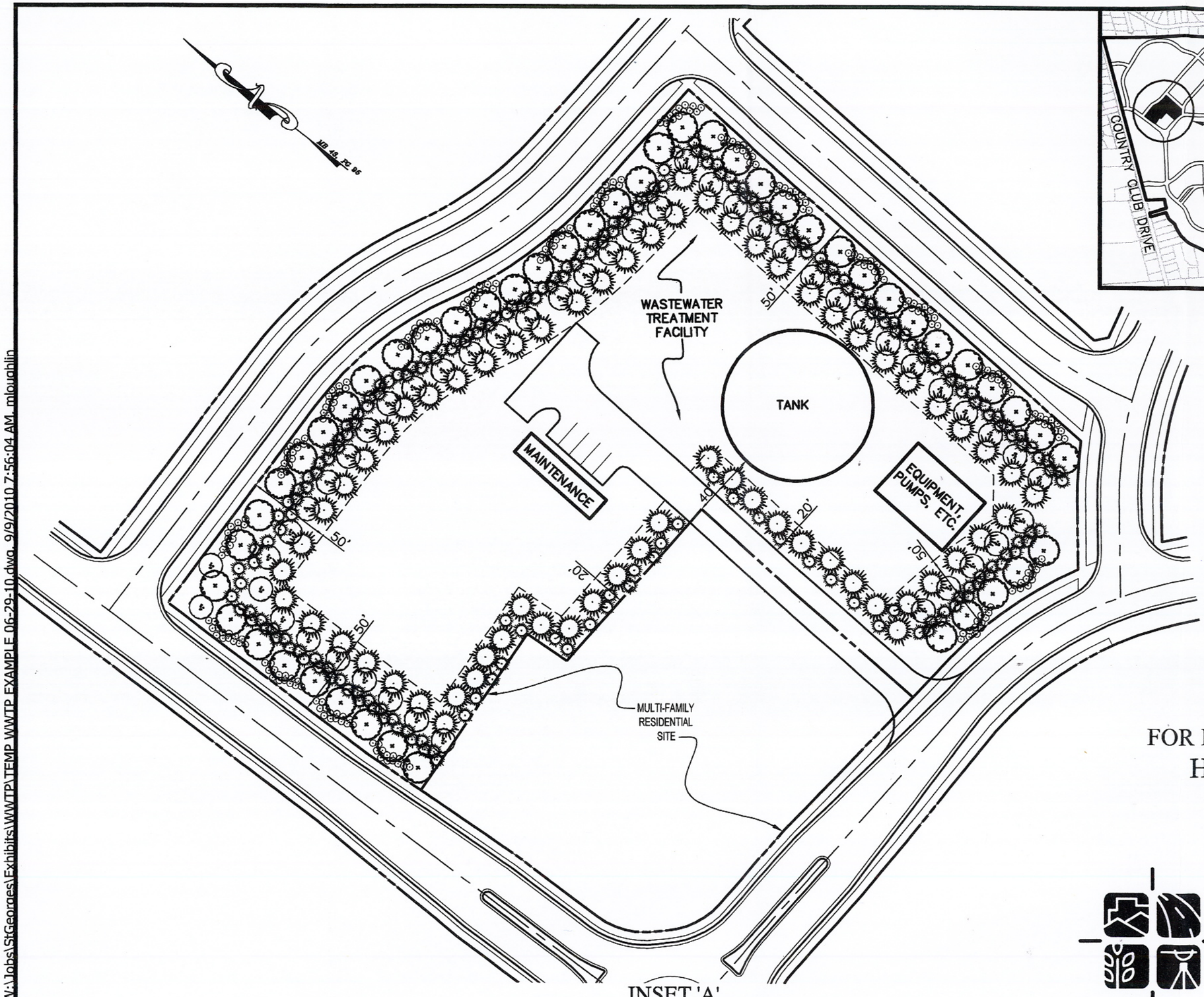
Exhibit B: Transfer Station dated August 11, 2010

Exhibit C: Standard NCDOT Cross Sections

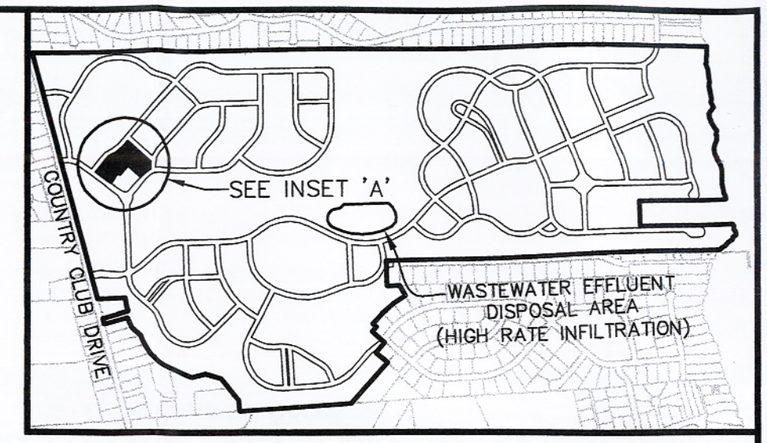
Exhibit D: Traffic Assessment prepared by Ramey Kemp & Associates dated August 23, 2010

Exhibit E: Letter from Applied Resources Management, PC dated September 7, 2010

Exhibit F: Water Capacity Letter from Pender County Utilities dated September 9, 2010



INSET 'A'



VICINITY MAP

1"=1500'

NOTES:

1. THIS EXHIBIT HAS BEEN PREPARED FOR INFORMATION PURPOSES ONLY.
2. IMPROVEMENTS SHOWN HEREON ARE APPROXIMATE AND SUBJECT TO FINAL ENGINEERING AND PERMITTING.

FOR ILLUSTRATIVE PURPOSES ONLY

HAWKSBILL COVE WWTP

Exhibit A

TOPSAIL TOWNSHIP

PENDER COUNTY, NORTH CAROLINA

DATE: 08-17-10

SCALE: 1"=60'

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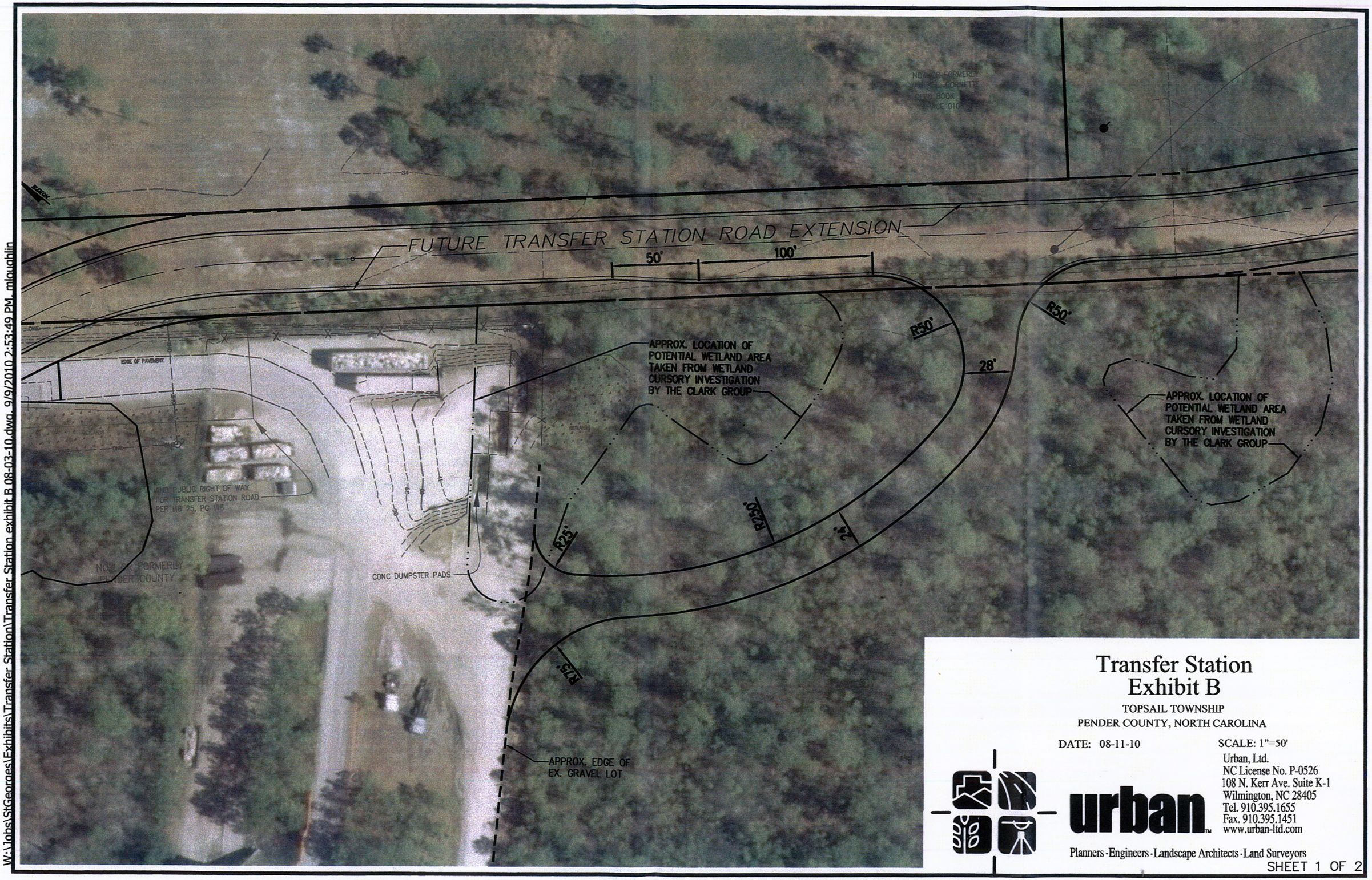
W:\Jobs\StGeorges\Exhibits\WWTP\TEMP WWTP EXAMPLE 06-29-10.dwg, 9/9/2010 7:56:04 AM, mloughlin



Transfer Station
Exhibit B

TOPSAIL TOWNSHIP
PENDER COUNTY, NORTH CAROLINA

DATE: 08-11-10

SCALE: 1"=50'

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W:\Jobs\StGeorges\Exhibits\Transfer Station\Transfer Station exhibit B 08-03-10.dwg, 9/9/2010 2:53:49 PM, mloughlin

Exhibit C

NCDOT Subdivision Roads Minimum Construction Standards

Standard Cross Section to be used on Hawksbill Cove roadways
Note: All roadways within the development east of Country Club Drive will include a sidewalk along one side at a minimum

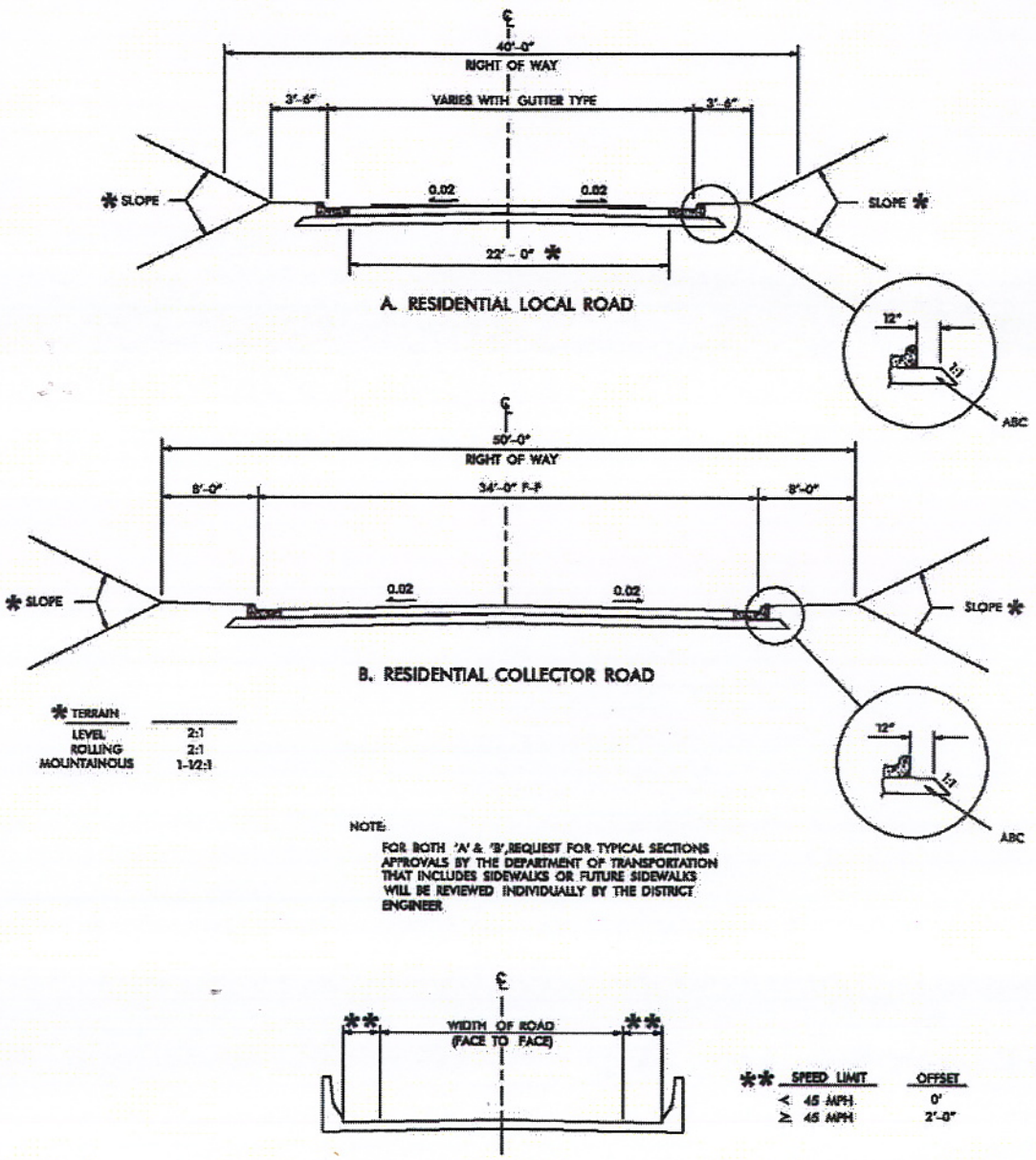


FIGURE 2: TYPICAL CURB & GUTTER CROSS SECTION

RAMEY KEMP & ASSOCIATES
TRANSPORTATION ENGINEERS

Exhibit D

RAMEY KEMP & ASSOCIATES, INC.
5808 Faringdon Place, Suite 100
Raleigh, NC 27609
Phone - 919-872-5115 Fax - 919-878-5416
www.rameykemp.com

August 23, 2010

Ms. Susan G. Gross
GF Management Company, LLC
4721 Emperor Boulevard, Suite 300
Durham, North Carolina 27703

Dear Ms. Gross:

This letter summarizes the findings of a Traffic Assessment [TA] prepared by Ramey Kemp & Associates, Inc. [RKA] associated with the existing Pender County Transfer Station site and its proposed access modifications due to the extension of the existing Transfer Station Road to Country Club Drive.

Due to the development of the proposed Hawksbill Cove site, the existing Transfer Station Road which currently connects with US 17, will be extended to connect to Country Club Drive. A new driveway connection for the Pender County Transfer Station site will be constructed along the connector road and will be utilized as the primary ingress/egress for all site traffic.

Data was obtained from Pender County associated with the number of tickets processed at the existing Transfer Station site. The report is for the period of July 1, 2010 through July 28, 2010 and indicates that a total of 1,477 tickets were processed during that period. Based on this information, it can be assumed that 1,477 vehicles entered Transfer Station Road from US 17 which equates to an average of 53 vehicles per day. A breakdown of the data indicates that approximately 272 of the trips were household trips, which are assumed to be passenger vehicles or pick-up trucks. The remaining 1,205 trips were assumed to be commercial trucks. A copy of the report is provided in the Appendix.

A Traffic Impact Analysis [TIA] was conducted for the proposed Hawksbill Cove site, which included the collection of turning movement count data at the existing US 17 and Transfer Station Road intersection during the AM peak period [7:00 AM to 9:00 AM] and PM peak period [4:30 PM to 6:30 PM]. The count data obtained indicated that a total of thirteen (13) vehicles turned onto Transfer Station Road from US 17 during the AM peak hour and a total of seven (7) vehicles turned onto Transfer Station Road from US 17 during the PM peak hour. Likewise, the counts indicated that a total of six (6) vehicles turned onto US 17 from Transfer Station Road during the AM peak hour and a total of thirteen (13) vehicles turned onto US 17 from Transfer Station Road during the PM peak hour. Figure 1 provides an illustration of the existing turning movement volumes at the subject intersection. Based on the existing count data and the data provided by Pender County associated with the total number of vehicles utilizing the Transfer Station site, it appears that traffic into the Transfer Station site is generally distributed throughout the day.

Although the existing traffic counts indicate that only seven (7) vehicles turned onto Transfer Station Road from US 17 during the PM peak hour, in order to provide a conservative estimate, the analyses consider that 50% of the fifty-three (53) average daily trips into the Transfer Station site, as defined in the Pender County data, occur during the PM peak hour. Based on this assumption, a total of twenty-six (26) vehicles were assumed to enter

the facility during this time period. Of the twenty-six (26) vehicles, an assumption was made that 75% of these trips were commercial trucks, which accounts for twenty-one (21) commercial truck trips during the PM peak hour. Additionally, it was assumed that 75% of the trips would enter the site from the north along US 17 and 25% of the trips would enter the site from the south from Country Club Drive. Figure 2 shows the projected traffic volumes at the Transfer Station site driveway during the PM peak hour.

A capacity analysis of the intersection of the proposed connector road and the Transfer Station site driveway was conducted utilizing the latest edition of the Synchro analysis software. The combined PM peak hour volumes illustrated in Figure 2 were utilized as the base volumes for the analysis. The results of the analysis are summarized in Table 1. It should be noted that a heavy vehicle percentage of 75% was utilized in the analyses for the Transfer Station Road site-related traffic. As shown, the eastbound Transfer Station site driveway is expected to operate at a Level of Service [LOS] 'C' during the PM peak hour, which indicates moderate delays with minimal queuing. The northbound left-turn movement along the connector road into the site is expected to operate at LOS 'A' with virtually no delay experienced. A copy of the Synchro output is provided in the Appendix.

TABLE 1
CAPACITY ANALYSIS SUMMARY

ANALYSIS SCENARIO	APPROACH	LANE CONFIGURATIONS	WEEKDAY PM PEAK HOUR LEVEL OF SERVICE	
			Approach LOS [Delay (seconds)]	Overall
COMBINED (2015) TRAFFIC	EB NB SB	1 LT-RT 1 LT-TH 1 TH-RT	C[2] [17.1] A[1] [0.3] --	N/A

1. Level of service for left turn movement on major approach.
2. Level of service for minor approach.

Based on the anticipated traffic volumes along the proposed extension of Transfer Station Road, as well as the traffic expected to utilize the Transfer Station site driveway, it is anticipated that the proposed two-lane roadway section, with no auxiliary turn lanes, will be adequate to serve traffic accessing the site.

If you should have any questions or comments regarding this traffic assessment, please feel free to contact me at (919) 872-5115.

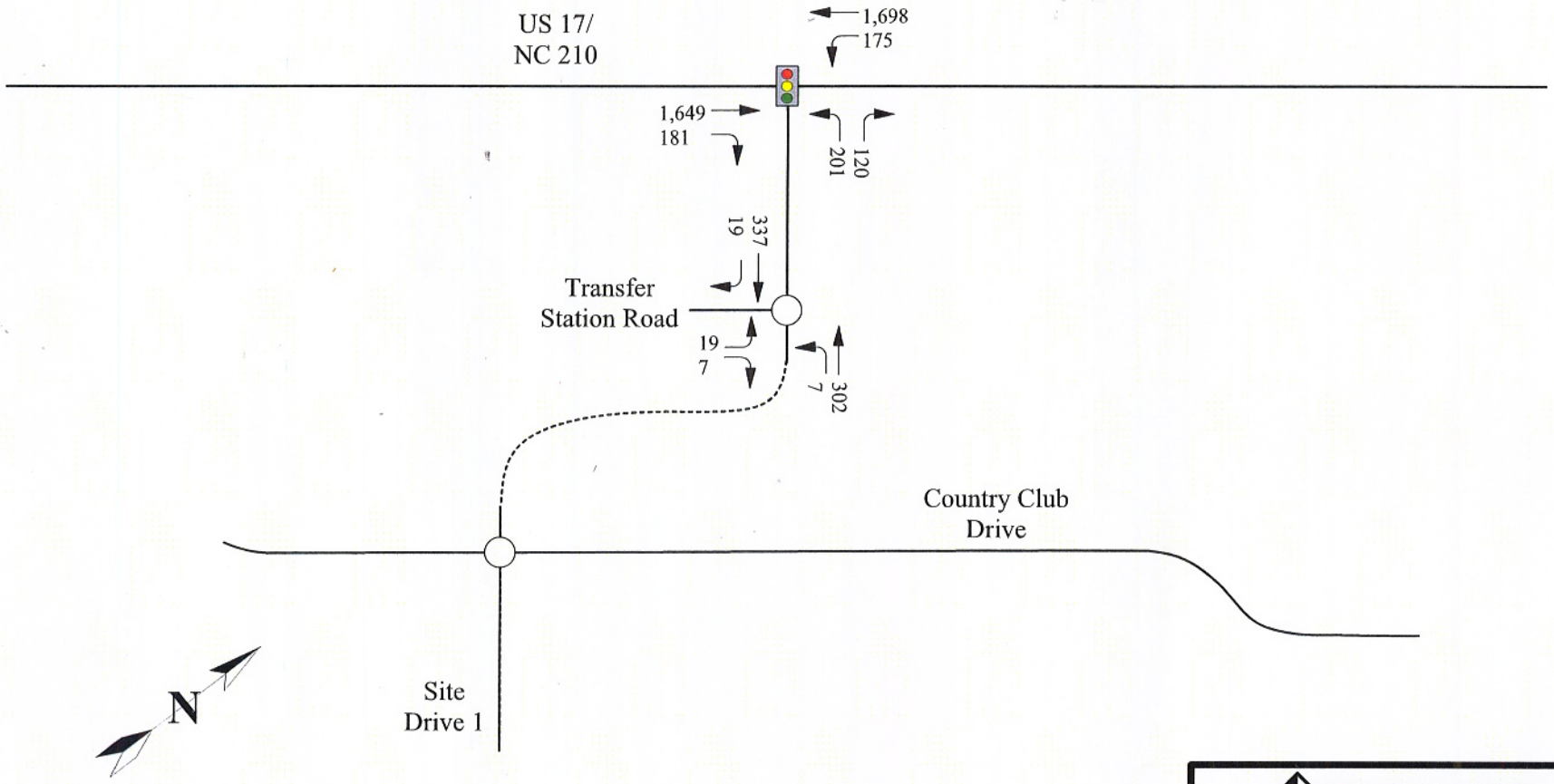
Sincerely,
Ramey Kemp and Associates, Inc.

NORTH CAROLINA PROFESSIONAL SEAL 32396 ENGINEER WILLIAM J. HAMILTON

8/23/10

W. Jason Hamilton, P.E., PTOE

Attachments



LEGEND

Signalized Intersection

Unsignalized Intersection

X/Y → AM/PM Weekday Peak Hour Traffic

RAMEY KEMP & ASSOCIATES

TRANSFER STATION ROAD
PENDER COUNTY, NORTH CAROLINA

Combined (2015)
PM Peak Hour Traffic

Scale: Not to Scale | Figure 2

TECHNICAL APPENDIX

Material Origin Report

Summary Report for For the Period 07/01/2010 - 07/28/2010
Sites: 1, 2
Origins - zzzzzzzzzzzzzzzzzzzzzzzzzz Groups - ZZZZZZZZZZ
Materials - ZZZZZZZZZZ Material Types - ZZ Accounts 0 - 999999 Customer Types - Z

Date	Origin	Material	Customer	Tickets	Count	Volume	Net Wt.	Charge
	ATKINSON	HSHLD N/C		9	0	0	56.71	0.00
	BURGAW	HSHLD N/C		7	0	0	50.23	0.00
	CALICO BAY	HSHLD N/C		8	0	0	52.05	0.00
	HAMPSTEAD	HSHLD N/C		31	0	0	287.61	0.00
	MAPLE HILL	HSHLD N/C		3	0	0	23.97	0.00
	MONTAGUE	HSHLD N/C		6	0	0	44.05	0.00
	OUT OF COUNTY	OUT OF CTY		4	0	0	0.59	95.58
	OUT OF COUNTY	WHITE		1	0	0	0.10	0.00
	PENDER COUNTY	C & D		364	0	0	204.96	14,347.20
	PENDER COUNTY	HOUSEHOLD		108	0	0	660.56	46,239.20
	PENDER COUNTY	TIRES		15	153	0	0.00	0.00
	PENDER COUNTY	WGHT ONLY		609	0	0	66.62	0.00
	PENDER COUNTY	WHITE		121	0	0	13.86	0.00
	ROCKY POINT	HSHLD N/C		19	0	0	159.93	0.00
	SHILOH	HSHLD N/C		7	0	0	43.50	0.00
	SURF CITY	C & D		1	0	0	0.62	43.40
	SURF CITY	HOUSEHOLD		31	0	0	322.28	22,559.60
	SURF CITY	HSHLD N/C		4	0	0	36.55	0.00
	TOPSAIL	HOUSEHOLD		23	0	0	144.25	10,097.50
	TOPSAIL	WHITE		1	0	0	1.10	0.00
	TRANSFER STATION	OUTGOING		88	0	0	1976.22	0.00
	WHITE STOCKING	HSHLD N/C		8	0	0	46.57	0.00
	WILLARD	C & D		1	0	0	0.11	7.70
	WILLARD	HSHLD N/C		8	0	0	68.84	0.00
			Report Total	1477	153	0	4261.28	93,390.18

TOTAL TRIPS IN 28 DAYS
ACROSS SCALES.

≈ 53 VEHICLES/DAY

Exhibit E

Applied Resource Management, P.C.

September 7, 2010

Urban Engineering
Attn.: Mr. Ryan G. David, PE, LEED AP
108 N. Kerr Avenue Ste. K-1
Wilmington, North Carolina 28405

Re.: Hawksbill Cove

Mr. David,

This firm was retained to conduct a hydrogeological investigation for wastewater recycling at the site. Extensive subsurface sampling and aquifer characteristic study has been conducted throughout the property. The site is underlain by well drained, loamy sands and sand layers to deeper than 50 feet. Hydraulic conductivity is good, and will support a water recycling operation. Based on findings to date, we are determining the geometry for a rapid infiltration system for recycling the neighborhood's entire wastewater requirements. Up to 500,000 gallons per day of re-use quality water is proposed into a single infiltration basin. The current basin is proposed at approximately 5.33 acres. The basin's primary purpose will be to allow for recharging the surficial aquifer, essentially recycling all of the water used on the property. The basin is also designed to help to maintain the water level within, and health of the property's wetlands.

All permitting and capacity calculations are being conducted within the NCDENR's NCAC T:15 0T or 0U rules and regulations.

If you have questions or require further information, do not hesitate to call.

Sincerely,

James L. Cornette, P.G.
Project Manager

NORTH CAROLINA
LICENSED
SEAL
14
JAMES L. CORNETTE

P. O. Box 882
Hampstead, NC 28443
910.270.2919
FAX 270.2988

Exhibit F

PENDER COUNTY UTILITIES
605 E. Fremont Street
P.O. Box 995
Burgaw, NC 28425
Phone - 910.259.1570
Fax - 910.259.1579
mmack@pendercountync.gov

Michael G. Mack
Director

September 9, 2010

Mr. Ryan David
Urban, Ltd.
108 N. Kerr Avenue, Suite K-1
Wilmington, NC 28405

Re: Hawksbill Cove
Water Capacity

Dear Mr. David:

In response to your request for water supply capacity to serve the proposed Hawksbill Cove Subdivision, please find this letter as written confirmation that Pender County Utilities will have the following available capacity to provide public water service to serve the various construction phases of the subdivision:

2010 - No capacity is available
2011 - 50 lots (approximately 10,000 gpd)
2012 - 50 lots (approximately 10,000 gpd)
2013 – No restrictions on availability foreseen at this time

PCU has been operating near our available water capacity (800,000 gpd) for the last two years. During this time, we have able to secure agreements for an additional 500,000 gpd from other local water purveyors. Construction of the necessary facilities to provide this water to the Rocky Point/Topsail Water & Sewer District are underway and we expect to have this additional supply available by June of 2011. In addition, construction of a 2 MGD PCU surface water treatment plant will begin in October 2010 and be on-line by 2013.

Please feel free to contact me for additional information pertaining to this matter.

Sincerely,

Michael G. Mack

Michael G. Mack

Pender County
Planning and Community Development

Planning Division
805 S. Walker Street
PO Box 1519
Burgaw, NC 28425

Phone: 910-259-1202
Fax: 910-259-1295
www.pendercountync.gov

MEMORANDUM

To: Pender County Planning Board

From: Kyle Breuer, Director

Date: December 7, 2010

RE: Topics of Discussion for Unified Development Ordinance Updates

Planning Board Members,

Staff is presenting the following topics of discussion for Planning Board review and comment. It is intended to address each of these topics within upcoming UDO text amendments. If you have any questions/comments prior to the meeting, feel free to contact our office for further clarification.

Unified Development Ordinance Updates

- **Access Requirements for 3-Lot and Family Subdivisions**

Given the conditions for approval and enforcement, Staff is suggesting that the following be considered for a text amendment.

6.4 3-LOT DIVISION ON AN ACCESS EASEMENT

6.4.1 Submission and Approval Requirements

A. Limitations - The following limitations will apply to three lot subdivisions:

1) Three lot subdivisions located on an access easement will be limited to no more than three such parcels (excluding the remnant parcel, if the remnant parcel meets the requirements of this ordinance and the zoning ordinance) being created from any parcel that had been created and recorded in the Registry before March 29, 2004.
2) The division does not create a new public or private street.

B. Requirements -The following shall be submitted to the Administrator with each proposal for a division of up to three lots fronting on an access easement that provides access to an existing NCDOT maintained public road:

1) Plat prepared as required by NCGS §47-30,
2) The plat shall be clearly designated "Three Lot Subdivision on Access Easement" in bold letters,
3) Certification by the Licensed Professional preparing the plat that each lot is adjacent to a natural drainage way or perennial stream or a 20 ft. drainage easement is recorded from each lot to a natural drainage way or a perennial stream or if the lot or lots front on a NCDOT maintained road, approval from NCDOT for such lots to drain to the public road,
4) The plat shows any designated Special Flood Hazard Areas located within the subdivision,
5) The plat shows any designated Areas of Environmental Concern located within the subdivision,
6) An Improvement Authorization Permit from Environmental Health for each lot to be created, a soil suitability analysis for each lot to be created or approval to connect to existing public sewer.
7) The lots, other than those restricted for building development or designated and reserved for open space, shown on the plat meet the requirements of the Zoning Ordinance,
8) Waste water disposal requirements – One of the following must be met:

a) An Improvement Authorization Permit has been issued for each of the parcels,
b) The soil suitability analysis shows that at least 5,000 sq. ft. of each lot is suitable for traditional on site waste disposal and the required 5,000 sq ft. is not within 10 ft of any lot boundary,
c) Approval has been granted to connect to public sewer or community sewer, or
a) Lots not meeting the requirements of a., b., or c. are indicated by the following note: "THIS PARCEL CANNOT BE USED FOR BUILDING DEVELOPMENT, UNLESS AN APPROVED WASTE WATER DISPOSAL METHOD HAS BEEN APPROVED AND PERMITTED BY THE PENDER COUNTY ENVIRONMENTAL HEALTH DEPARTMENT OR APPROPRATE STATE AGENCY OR UNLESS A NEW PLAT IS APPROVED AND RECORDED AS REQUIRED UNDER THIS ORDINANCE."
d) For alternative, see Design Requirements, Lots Section of this ordinance for "Special Purpose Lots."

9) The lots created have access to an access easement as defined in this ordinance,
10) The access easement that provides access to a public street is no longer than 500 ft.
11) A minimum ***passable travel way*** 20 feet wide shall be provided within a forty five (45') foot easement at time of zoning approval.
12) Clearing and grubbing shall be completed five feet of each edge of the travel way;
13) Maintenance
    a) Upon determination by the Administrator that such travel way as approved are not passable, the Administrator may, in addition to other remedies, prevent issuance of any further development approvals until such travel ways are in a proper state of maintenance as determined by the Administrator.
14) The Administrator determines that the subdivision complies with the limitations on Three Lot Subdivisions contained in the General Provisions Section of this ordinance.
15) The plat contains an ownership and dedication statement signed by the owner or owners.
16) The plat contains the following note: "All new access easements shown or designated on this plat, include the transfer of an easement to public entities and public utilities for the purpose of installation and maintenance of water, sewer, electric and communication lines."
17) The plat must contain the following note: "All new access easements shown or designated on this plat include the transfer of an easement to Pender County, its employees and agents for access for emergency personnel (police, fire & rescue) and Pender County and its employees for administration of all Pender County Ordinances."

Appendix A – Definitions
PASSABLE TRAVEL WAY: Conditions which allow a passenger or emergency vehicle to negotiate the travel path using reasonable care. A passable travel way must be free of obstacles or obstructions.

- **Access Management Standards**

Number of Curb Cuts Permitted
The maximum number of curb cuts for each property shall be determined by length of road frontage and the maximum speed limit of the road.

Number of Curb Cuts

Length of Street Frontage	Maximum Number of Curb Cuts*
600 feet or less	1
601 – 1100 feet	2
1001 – 1500 feet	2
More than 1500 feet	3

*Where lots are contiguous, a common ingress/egress drive is encouraged to minimize curb cuts and better facilitate traffic.

Distance Between Curb Cuts

Travel Speed Permitted	Minimum Distance Between Curb Cuts
35 mph	100 feet
45 mph	250 feet
50 mph	300 feet
55 mph	350 feet

Offset

Either the centerline of opposing nonresidential driveways shall align, or shall be offset no less than seventy-five (75') feet. This condition shall not apply where a permanent median exists without break for these driveways.

These potential access management standards can be incorporated within the UDO, Article 6 – Development Standards and Subdivision Design.

Sincerely,

Kyle M. Breuer, Director