

Sparrows Bend Narrative Update – 17 August 2016:

This narrative and associated plan reflect changes per Planning Board comments from meeting August 2, 2016. We heard the comments of the planning board regarding density, collector roads and exceptional (or superior) design criteria. We present our response in written form by this narrative and in visual and written form on the revised plan submitted for staff and board reviews.

- A. We revised the density for the overall project. Previously we presented 399 units (135 single family and 264 apartments). We now present a lower density at 365 units (137 single family lots and 228 apartments). This density change represents an 18% reduction in density. It was discussed in the previous board meeting that the previous density of 399 units, or a 60% density bonus request through the exceptional design for environmentally sensitive design, seemed unreasonable; however, something less than 50% density bonus may be more realistic. The plan now requests a 42% density bonus for exceptional design for environmentally sensitive design complying with the opinion discussed in the August 2nd planning board meeting.
- B. We also bring a plan with approximately 0.2 acres less land allocated to the Sparrows Bend development. The proposed project density has been adjusted to reflect the pending property transfer along the Old White Marsh access easement. The easement area currently located on the Sparrows Bend property has been removed from the overall site acreage and the subsequent calculations have been adjusted per the Pender County UDO. The developer is in investigating the legal rights and working with adjacent homeowners to understand how the adjacent owners are using the existing easement to access their property. The developer intends to continue conversations and potentially transfer this easement property to the adjacent owners if all parties are willing. Therefore, this plan removes that easement land from this density calculation and adjusts the buffer along Old White Marsh road to a 10' buffer with a fence at the edge of the Sparrows Bend adjusted property line.
- C. Road C has been changed to a collector road from its original layout to be compliant with the existing UDO & adopted county wide plans. Revisions to its layout include:
 - 1. New alignment, providing a stub out for potential future connection to the adjacent parcel and providing 5' sidewalks on both sides of the road, compliant with Group 1 of Pender County Collector Street Plan
 - 2. Shared driveways have been indicated to allow for a reduction in individual residential lot access per Pender County UDO 7.2.7: *"Lots on Collector Streets of Major Subdivisions shall not be approved that provide for individual residential lots to access Minor Collector roads or streets as shown on the Coastal Pender Collector."*

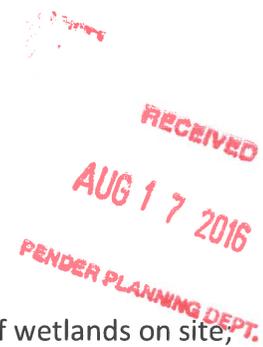
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Street Plan, Pender County Transportation Plan or other approved State of Federal Transportation Improvement Plan”

- D. Superior Design strategies have been included and highlighted on the plan to qualify the project for the proposed density increase. These efforts include:
1. This revised plan outlines the Implementation of LID measures (to the extent possible) in accordance with Pender County UDO 7.14, NC State Statutes and *Chapter 4: LID Stormwater BMPs of North Carolina State University’s Low Impact Development: A Guidebook for North Carolina*. These measures include the stormwater management and runoff treatment requirements therein and also include the implementation of the following:
 - i. Compliance with requirements for stormwater management as set forth in NC State 15A NCAC 02h.1005 (storm water ponds will be sized with final soils reports)
 - ii. Utilization of a combination of engineered, structural LID BMPs as defined in *Chapter 4: LID Stormwater BMPs of North Carolina State University’s Low Impact Development: A Guidebook for North Carolina* and designed in accordance with NC State 15A NCAC 02h.1008 to treat runoff from all surfaces generated by one and one-half inches of rainfall, or the difference in the stormwater runoff from all surfaces from the predevelopment and post-development conditions for a one-year, 24-hour storm, whichever is greater, in order to achieve average annual 85% Total Suspended Solids (TSS) removal for the developed area of the site
 - iii. Utilization of a combination of engineered structural LID BMPs as defined in *Chapter 4: LID Stormwater BMPs of North Carolina State University’s Low Impact Development: A Guidebook for North Carolina* to control and treat the increase in storm water runoff volume associated with post-construction conditions as compared with pre-construction (existing) conditions for the 1-year frequency, 24-hour duration storm event in order to achieve a storage volume discharge rate equal to or less than the predevelopment discharge rate for the 1-year, 24-hour storm event. This may be achieved by hydraulic abstraction, recycling or reuse, or the other accepted management practices as described in the North Carolina Department of Water Quality’s *Stormwater Best Management Practices Manual*, and in consultation with North Carolina State University’s *Low Impact Development: A Guidebook for North Carolina*, which includes:
 1. bio retention / rain gardens
 2. permeable pavement
 3. water harvesting / rain barrels
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4. swales
 5. infiltration strips and basins
 2. Preservation of majority (± 11.15 ac out of ± 11.65 ac) of wetlands on site, intended wetland impact is less than 0.5 ac
 3. Preservation of significant trees on site per UDO Section 8.1.3.A.2
 4. Preservation of substantial natural site features such as the existing ridge separating the single family and multi-family areas, as well as other clusters of old growth trees and vegetation
 5. Preservation of existing natural landforms and drainage patterns, reducing the amount of required grading
 6. Use of native and adaptive plants well suited to our southeastern North Carolina climate
 7. Creation of a walkable community with sidewalks on every street & throughout the apartment community
 8. Implementation of pervious paving at amenity area patios
 9. Provision of multi-purpose outdoor recreation spaces
 10. Installation of an accessible 2-12 year old playground at the multifamily active open space
 11. Creation of courtyards at the apartment area, serving as gathering spaces and promoting social interaction
- E. In addition to the Superior Design measures proposed that fall under the Pender County UDO and as defined in *Chapter 4: LID Stormwater BMPs of North Carolina State University's Low Impact Development: A Guidebook for North Carolina*, the project strives to implement strategies found in neighboring municipalities which result in density increases, such as:
1. use of LID techniques as described in Section C of this narrative
 2. wetland preservation
 3. inclusion of porous pavement to minimize stormwater runoff
 4. preserving undeveloped open space and existing vegetation
 5. xeriscaping to minimize water use
- F. DRC Hampstead, LLC, not only seeking to satisfy Pender County's requirements for a Superior Design project, but has investigated other leading exceptionally designed project standards and requirements and is including the following strategies integral in those projects:
1. Preservation of wetlands
 2. Managing storm water on site
 3. Using storm water management and treatment features as amenities
 4. Minimizing site disturbance
 5. Use of native and adaptive plants
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