

Sumter City-County Planning Commission

October 24, 2012

SD-12-01, Deschamps Road Subdivision (County)

I. THE REQUEST

Applicant: Black River Land Services of Sumter, LLC

Status of the Applicant: Design Builder for Owner Dunlap Properties, LP

Request: A request for preliminary plat approval to develop a 108 lot residential subdivision.

Location: East side of Deschamps Rd., +/- 100 ft. south of the intersection of Patriot Pkwy. And Deschamps Rd.

Size of Property: +/- 44.95 acres

Present Use/Zoning: Undeveloped Wooded parcel/Residential-6 (R-6)

Proposed Use of Property: Residential Subdivision

Tax Map Reference: 184-00-01-010

Adjacent Property Land Use and Zoning:
North – Undeveloped (AC)
South – Undeveloped/Residential (AC)
East – Religious/Residential/Recreation (PD)
West – Undeveloped/Residential (AC) & Deschamps Rd.

II. BACKGROUND

The applicant proposes to develop a 108 lot residential subdivision on a 44.95 acre tract. The area proposed for development, shown in the graphic to the right, is the same tract of land that was rezoned by Sumter County Council under RZ-12-03 on August 14, 2012.

The applicant has indicated that the property will be annexed in to the City of Sumter prior to the first phased of development, therefore;



although technically this development is under the jurisdiction of Sumter County, the subdivision is being reviewed using City of Sumter Subdivision Development Standards.

III. COMPATIBILITY WITH THE 2030 COMPREHENSIVE PLAN

The single dominating notion of the 2030 Comprehensive Plan is for the City and County to manage growth in such a way that individual development adds value to the community at large.

As shown in the 2030 Comprehensive Plan Map to the right, the proposed area for rezoning is influenced by the Suburban Development Planning Area (SD) and the Priority Commercial/Mixed-use Area.



The primary objective of the Suburban Development designation is to scrutinize and manage the existing development patterns, foster intentional mixed-use development and identify new commercial and industrial locations where form and design are a focus, all in a more efficient manner. Priority commercial and mixed use areas or nodes are identified on the map to direct future, high quality commercial and mixed use development. The areas include anticipated green fields as well as established locations expected to redevelop with higher and better uses over time.

The type of development, the timing of development, and the relationship to existing and surrounding development is critical to securing new commercial and residential development of a quality equal to our newfound expectations. The location under review is a green field site adjacent to one of the largest established mixed use planned developments in the Sumter Community.

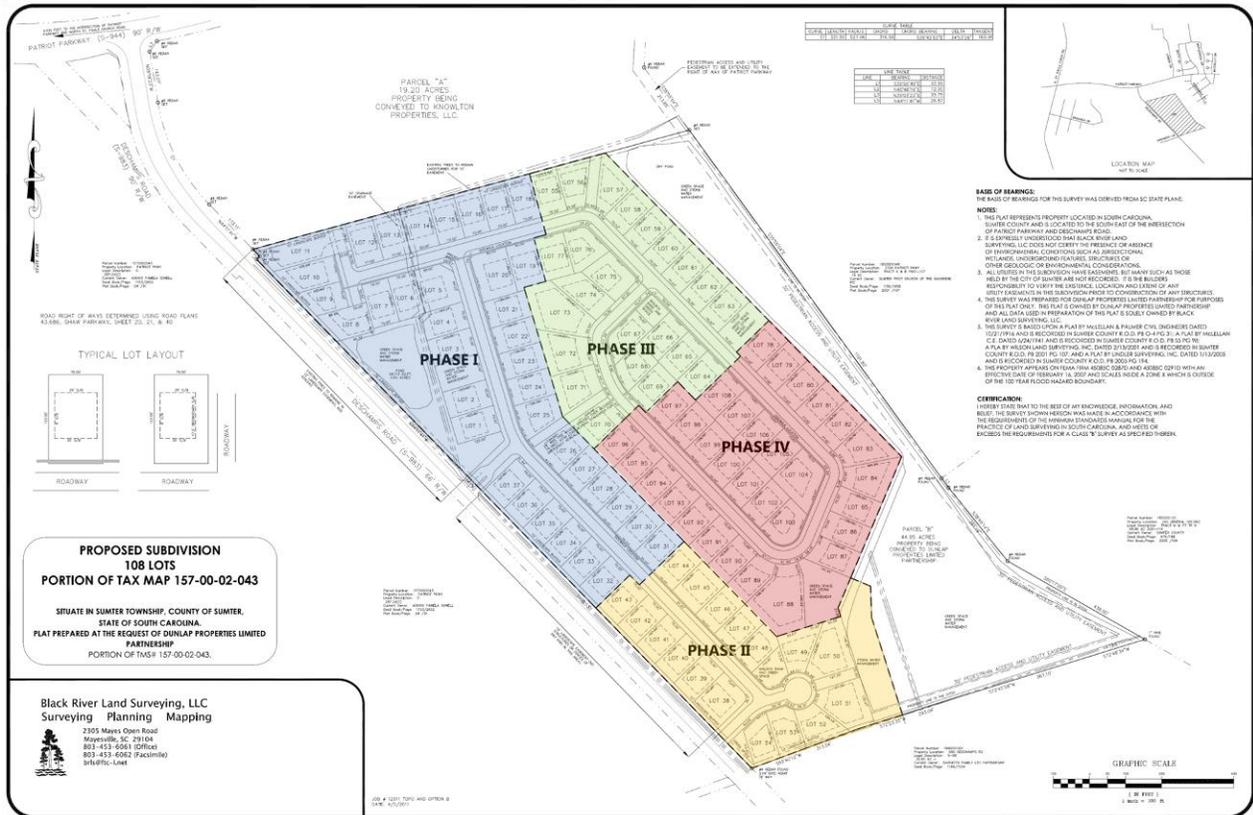
As submitted, the development would result in 108 single-family residences with a pedestrian trail connecting to the adjacent Patriot Park Sports Complex as well as Patriot Pkwy. sidewalk network to the north adjacent to First Church of the Nazarene.

Weighing Plan objectives carefully in conjunction with established patterns of development in the vicinity, the request in conjunction with a development plan that connects the new subdivision to adjacent established uses through a comprehensive sidewalk and trail network with a system of open space planning will help to foster development that meets the expectations of the Plan.

IV. PRELIMINARY PLAT REVIEW

Based on Article 7, Section 7.d.5, the approval of the preliminary plat constitutes approval of the subdivision as to its character, intensity of development, general layout, and the approximate dimensions of streets, lots and other planned features. This approval binds the developer to the general scheme of the subdivision and permits the developer to proceed with the installation of site improvements, subject to obtaining other necessary permits. An applicant may request final

approval for the whole development or for a section of the preliminary plat as long as specific phased approval is granted by the Planning Commission Board. Based on Planning Staff's understanding of the preliminary plat submission, the developer is requesting to develop this subdivision in four phases. As shown in the graphic below.



This proposal is for a single-family detached subdivision developed using Residential-6 development standards, and has been reviewed as such.

Zoning District Requirements

The purpose of the Residential-6 (R-6) zoning district is to provide for a variety of single-family housing on small lots to meet market demands for smaller lot development. It is also the intent of this district to balance higher densities with common open space. Residential permitted uses within the R-6 district include single-family detached dwellings, duplexes, single family attached dwelling, accessory uses such as bathhouses, cabanas, non-commercial greenhouses, private garages and carports, storage buildings, swimming pools, tool sheds and workshops and home occupations. This district also allows accessory apartments subject to the development criteria established in Section 4.g.2 of the Zoning Ordinance.

The minimum development standards in the R-6 District for Single-family detached dwellings are as follows:

- Minimum Lot Area Per structure: 6,000 sq. ft. (approx. 0.14 acres)
- Minimum Lot Width: 60 ft. at front setback
- Minimum Yards, Per Structure:
 - Front – 35 ft.
 - Side – 8 ft.

Rear – 20 ft.	
Maximum Impervious Surface Ratio:	45%
Common Open Space Ratio:	None required
Maximum Density (units per gross acre):	7.2
Maximum Building Height:	35 ft.

The average lot size in this development is 0.23 acres with lots ranging in size from 0.19 acres up to 0.51 acres. All lots meet the minimum lot width of 60 ft. at the minimum building line and are within the required residential width to depth ratio requirement of 1:2.5. Each parcel has enough buildable area to meet all minimum setback standards without exceeding the maximum 45% impervious surface ratio. The proposed subdivision does not exceed the permitted maximum unit density. We note for the records that several lots are irregularly shaped (lots 8, 9 among others). We caution the developer that typical house plans may not fit on several of these lots.

Tree Protection, Buffering, Landscaping, & Open Space Plans:

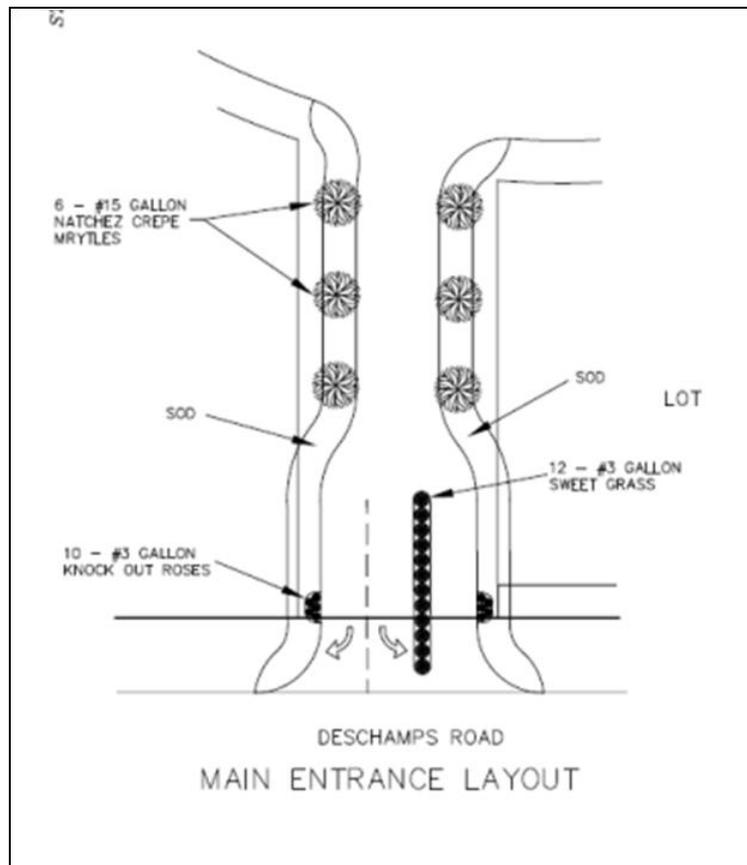
Section 8.d.3.b requires the submission of a tree survey and tree protection plan. The trees present on the property are predominantly planted Pines. As shown in the Pictometry to the right, the densest area of tree coverage is on the east side of the property in the area designated for development of a low impact stormwater management in addition to a trail system connecting to the Patriot Park Sports Complex. Planning Staff has walked the property with the applicant and the development plans have been created to preserve the existing mature trees on the perimeter buffers.



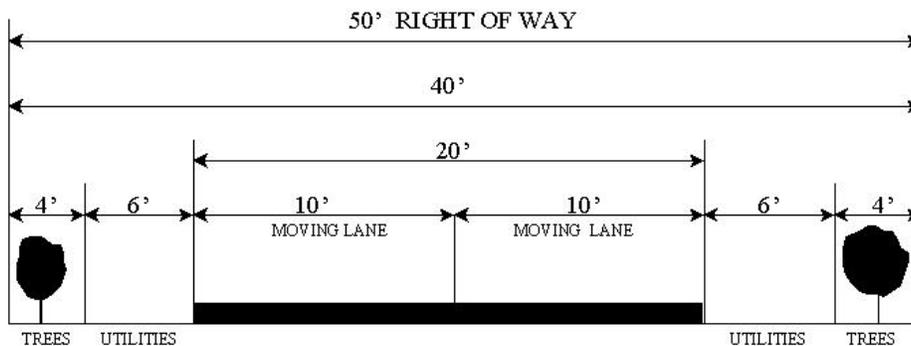
As per Article 8, Section 8.b.6., reasonable landscaping should be provided at site entrances, in public areas, adjacent and around the perimeter of buildings. Additionally, in accordance with Section 8.d.7., buffering shall be provided when natural land features or existing vegetative barriers do not provide reasonable screening. Buffering shall be provided to shield neighboring developed or undeveloped properties from any adverse external effects of a development. A buffer strip of 10 ft. in width is required where more intensive land uses or zoning districts abut less intensive land uses or zoning districts. In high density developments, the Sumter City-County Planning Commission may require landscaping, fencing, or walls to screen dwelling units for privacy, and buffering may be required for front, side, or rear property lines, excluding driveways.

The applicant has submitted a detailed landscaping plan that addresses planting within stormwater management areas, along the Deschamps Rd. street front as well as the northernmost and southernmost boundaries of the development.

The main entrance in to the development will also be planted according to the following graphic:



Street trees are also required for this development. One street tree must be planted for each lot. Required street trees should be planted in the first 4 ft. outside of the designated utility easements as shown in the graphic below.



Stormwater management facilities will be interspersed throughout the development as part of a low-impact stormwater design. As part of this plan, the low impact infiltration areas will receive a combination of Centipede Sod as well as hydro seeded with Centipede grass seed.

Proposed Roadway/Sidewalks – The proposed roadway will be asphalt with concrete curbing. The intensity of development based on average lot width as per section 8.e.3.b is “medium” intensity. As per exhibit 17, due to the projected traffic of approximately 10.06 average weekday trips per dwelling unit, the proposed road is considered to be a residential subcollector street.

Residential subcollector streets in medium intensity developments with off-street parking are required to have two 10 ft. travel lanes with no parking lane resulting in a total pavement width of 20 ft. As indicated on the submitted application, the proposed street will have concrete curbing. When doing conventional concrete curbing, a 12 month maintenance guarantee is required as part of final approval.

Sidewalks are a requirement on at least one side of the street based on the current development proposal and street profile in the City, we are applying City standards as we understand annexation is proposed. The applicant has submitted plans showing the proposed location for all sidewalks as shown in the graphic below in red.



All sidewalks shall be constructed in accordance with Article 8, Section 8.e.5. as follows:

- b. Sidewalks shall measure four and one-half (4 ½ ft.) feet in width; wider widths may be necessary near traffic generators.*
- d. All pedestrian areas must be compliant with ADA (Americans with Disabilities Act) standards in accordance with ANSI 117.1, the City of Sumter Design Standards for Sidewalks, and SCDOT standards as applicable.*
- e. All driveways in subdivisions or private housing shall be depressed at the street.*

In addition to a paved sidewalk network, the applicant shall install a pedestrian trail, shown in the graphic above in orange, which will connect the development to Patriot Park Sports Complex to the west and the Patriot Pkwy. sidewalk network to the north. The pedestrian trail is to be graded with a wooden mulch treatment but shall not be paved.

Environmental Issues:

The property is not in a Special Flood Hazard Area. The property is designated as being in Zone X, as shown on FEMA FIRM Panels 45085C0291D; effective date: 2-16-2007.

There are no mapped wetlands as shown on the National Wetlands Inventory.

Stormwater Management Plan:

Stormwater plans are currently under review.

Public Safety:

Fire – The proposed plan was reviewed by Robbie Rickard, Fire Inspector with the Sumter Fire Department. It has been determined that the proposed plans meet minimum fire safety requirements.

V. UTILITIES

Utility plans are not required for preliminary plat approval however the applicant has indicated the following:

Sewer & Water – Sewer and Water are to be provided by the City of Sumter after annexation is completed. The applicant has submitted engineered drawings for the sewer and potable water plans in addition to

Electric – Progress Energy Carolinas

Telephone – Farmers Telephone Cooperative

VI. TRAFFIC REVIEW

Per Section 7.d.10 of the City of Sumter – Zoning & Development Standards Ordinance, Major Subdivisions that require 100 or more off-street parking spaces must submit a Traffic Impact Study (TIS). Based on the required number of parking spaces, a TIS was submitted titled, “Traffic Impact and Access Study Deschamps Road Residential Development Sumter County, South Carolina” Prepared by SRS Engineering and dated July 27, 2012.

The project site is located along the east side of Deschamps Road (S-983), south of Patriot Parkway (US441) and north of Wedgefield Road (US 763). The development site is approximately 45-acres of undeveloped land for the construction of 108 single-family units. The development will be developed in phases with 2014 as the build out year.

After a scoping telephone conference with the Sumter Planning Department, the developer agreed to analyze the following intersections:

- Patriot Parkway and Deschamps Road (unsignalized intersection)
- Patriot Parkway and Loring Mill Road (Signalized intersection)

In accordance with the Institute of Transportation Engineering, Trip Generation Manual, 8th Edition (LUC 210), 108 single family units is projected to generate a number of vehicle trips during the peak hours as shown in Table 1.

**Table 1
Project Trip Generation**

Time Period		108 Single Family Residential Units
Weekday Daily		1,034
AM Peak Hour	Enter	22
	Exit	61
	Total	83*
PM Peak Hour	Enter	70
	Exit	40
	Total	110*

*The 7/27/12 TIS reported the AM and PM peak hour trips of 86 and 113 respectively. The developer corrected the number on 8/13/12 after the advice of the Planning Department of Sumter.

The generated vehicle trips will be distributed on the study area roadways as shown on the Table 2 below. The trip distribution is the directional flows of traffic determined by existing current traffic pattern volume. In accordance with the SCDOT Annual Average Daily Traffic volume counts, the east side (AADT, 10,200) of Patriot Parkway (Wise Drive) shows more traffic volume than the one on the west (AADT 9,900). Thus, 40% of traffic was distributed on the east whereas 30% was distributed to the west. The south side of Deschamps Road is accounted for with about the same volume of traffic as north of Loring Mill (AADT 3,100).

**Table 2
Trip Distribution Pattern**

Roadway	Direction To/From	Percentage(AM/PM PeakHour)
Patriot Parkway*	East	40
	West	30
Deschamps Road	South	15
Loring Mill Road	North	15
	Total	100

* The 7/27/12 TIS reported that 30% East and 40% West for the Patriot Parkway trip distribution. However, the developer corrected on 8/13/12 the number to 40% East and 30% West after the advice of the Planning Department.

In order to evaluate the generated vehicle trips impact at the project site, the existing traffic conditions were surveyed.

Patriot Parkway (US 441) is a roadway running east and west with the posted speed limit of 45 mph. The eastbound roadway is one exclusive left and one through with one separated right turn lane drives away from the intersection to the southbound of Loring Mill. The westbound is a three-lane roadway with an exclusive left, one thru and one through/right lane.

Loring Mill Road (US 204) is a roadway running north and south with the posted speed limit of 45 mph. The southbound road is one exclusive left turn lane and one with through and right movement. The northbound road is one exclusive left, one through lane and one with exclusive right turn movement.

Deschamps Road (S-983) is a roadway running north and south with the posted speed limit of 55 mph. It is a T-intersection. The northbound road at the intersection of Patriot Parkway is a two-lane, one left and one right turn movements.

The morning and afternoon peak hour traffic movement counts were collected during the weekday at these roadway intersections. The traffic data then was analyzed in accordance with the HCM (Highway Capacity Manual) methodology to determine the Level of Service (LOS). The LOS is a qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience. The measurement has categorized into six levels of traffic flow conditions for both signalized and unsignalized intersections in terms of delay in seconds per vehicle. The tables below show the criteria for six levels:

Signalized Intersections LOS criteria	
LOS	Control Delay Per vehicle (s/veh)
A	< or = 10
B	> 10-20
C	>20-35
D	>35-55
E	>55-80
F	>80

Unsignalized Intersections LOS Criteria	
LOS	Control Delay Per Vehicle(s/veh)
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

The Highway Capacity Software calculated based upon all the collected data, the Level of Service of current conditions operating during AM and PM peak hours in A and C respectively. The existing delay time per vehicle is considered satisfactory for both morning and afternoon peak. However, when the site generated vehicle trips and annual growth of traffic volume are taken into account into the analysis, the level of service has changed as shown in the table below during the AM and PM peak:

Level of Service Summary										
Signalized Intersection	Time Period	2012 Existing			2014 No Build			2014 Build		
		V/C*	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS
Loring Mill Road at Patriot Parkway	AM	0.36	6.4	A	0.46	6.8	A	0.47	7.0	A
	PM	0.50	7.5	A	0.68	11.3	B	0.70	11.6	B
Unsignalized Intersection Deschamps Road at Patriot Parkway	AM	0.41	17.1	C	0.51	22.1	C	0.61	26.7	D
	PM	0.22	17.7	C	0.32	23.9	C	0.45	32.2	D

*V/C is volume to capacity ratio that traffic volume in relation to the capacity of roadway.

The TIS recommended a two site access point lane configuration design which appears to be consistent with SCDOT ARMS Manual Standard. Deschamps Road is the only access road for the site traffic ingress and egress. The main access point is located on Deschamps Road closer to Patriot Parkway. The secondary access point is located 2,700 feet from the main site access on Deschamps Road. Both access points were recommended for the following lane configuration for traffic movements:

Deschamps Road @ Main Site Access and @ Secondary Site Access:

- **Northbound (Deschamps Road) Approach:** Provide a single shared through/right-turn lane.
- **Southbound (Deschamps Road) Approach:** Provide a single shared left-turn/through lane.
- **Westbound (Main Site Access) Approach:** Construct/stripe a new westbound approach leg to create intersection. Provide a separate left-turn and a separate right-turn lane exiting the site
- **Traffic Control:** Place a new westbound approach STOP sign for exiting turning movement.

These two access points are considered as unsignalized intersections for evaluating the congestion level during peak hours. To this end, the HCM methodology can be applied to project the level of service when the project is fully built. The HCM analysis has calculated based upon the proposed lane configurations and the traffic volume generated by the site and showed the good results during the AM and PM peak as shown in the table below:

Level of Service Summary Site Access Intersections			
Site Access Intersection	Time Period	2014 Build with proposed access design	
		Delay	LOS
Deschamps Rd @Main Access	AM	10.8	B
	PM	12.2	B
Deschamps Rd @Secondary Access	AM	9.8	A
	PM	9.2	A

Staff has reviewed and analyzed the TIS for the Deschamps Road Residential Development Project. Staff has found that the traffic is projected to be operating in a satisfactory condition on the signalized intersection (Patriot Parkway and Loring Mill Road) and the unsignalized intersection (Deschamps Road and Patriot Parkway) when the project will be fully built in 2014 with the proposed lane configurations design at the access points. No mitigation measures beyond those currently proposed are recommended.

VII. SUBDIVISION-PLANNED DEVELOPMENT REVIEW – August 7, 2012

Planning Staff met with the applicant prior to the Technical Review meeting to discuss plan deficiencies. The primary discussion at Technical Review was related to site access and emergency management access, as well as stormwater management and sewer and water service.

The applicant has since submitted engineered plans and plans requested by Planning Staff. The only outstanding item from Technical Review is related to Annexation into the City of Sumter. Staff has been informed that the developer will be filing for annexation in January 2013.

VIII. STAFF RECOMMENDATION

Staff recommends approval of SD-12-01 subject to the future subdivision submissions meeting all Zoning Ordinance and development standards, consistent with the preliminary plat (Attachment #1), the landscape plan (Attachment #2) and the recommended conditions in the attached “Conditions of Approval” for SD-12-01.

IX. DRAFT MOTION

- 1) I move that the Planning Commission approve SD-12-01, subject to the preliminary plat titled, “Proposed Subdivision 108 Lots Portion of Tax Map 157-00-02-043” received by Planning Staff October 15, 2012, prepared by Black River Land Surveying, LLC, the Landscape plan titled, “Proposed Landscape Plan for 108 Lots Portion of Tax Map 157-00-02-043” received by Planning Staff September 5, 2012, prepared by Black River Land Surveying, LLC, and the Conditions of Approval dated October 24, 2012.
- 2) I move an alternate motion.

X. PLANNING COMMISSION – OCTOBER 24, 2012

The Sumter City-County Planning Department at its meeting on Tuesday, October 24, 2012 approved this request subject to the preliminary plat titled, “Proposed Subdivision 108 Lots Portion of Tax Map 157-00-02-043” received by Planning Staff October 15, 2012, prepared by Black River Land Surveying, LLC, the Landscape plan titled, “Proposed Landscape Plan for 108 Lots Portion of Tax Map 157-00-02-043” received by Planning Staff September 5, 2012, prepared by Black River Land Surveying, LLC, and the Conditions of Approval dated October 24, 2012.

SD-12-01, Deschamps Road Subdivision (County)
October 24, 2012

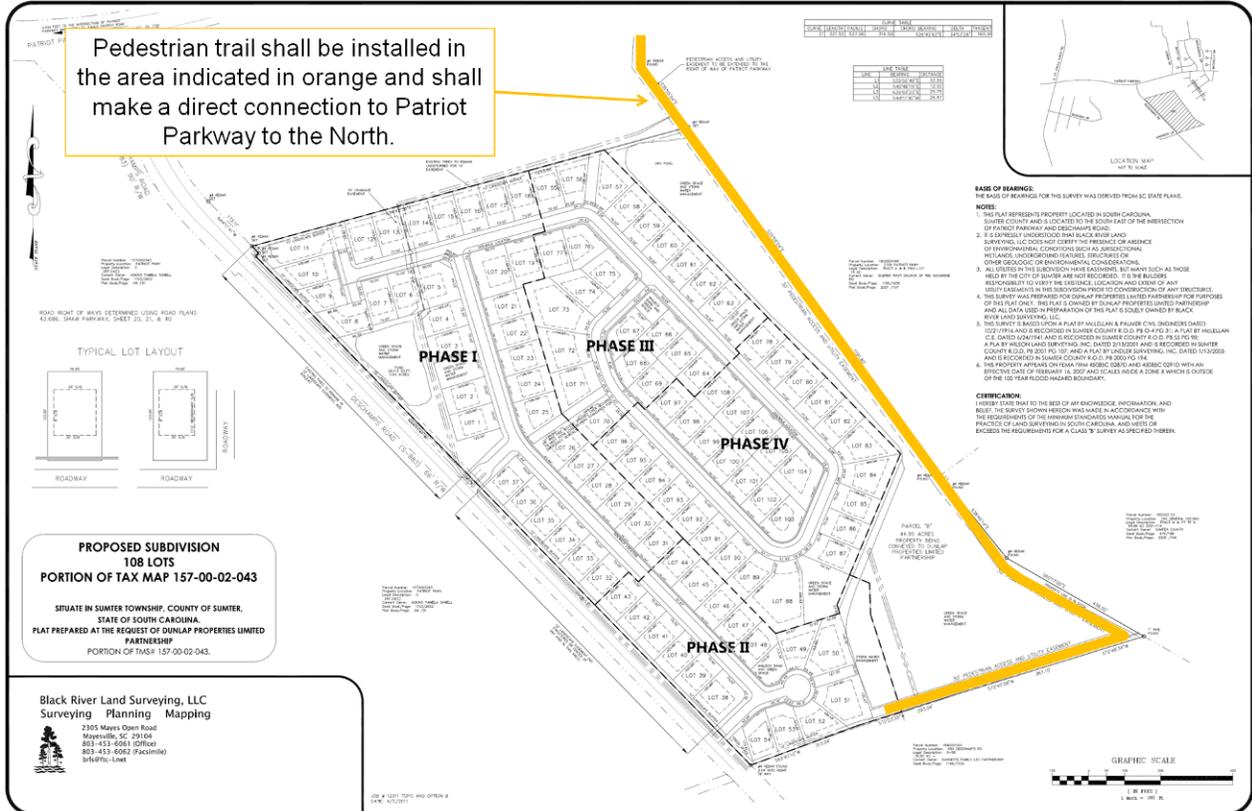
Conditions of Approval

1. The property shall be developed in substantial conformance to the preliminary lot layout shown in the plan titled, "Proposed Subdivision 108 Lots Portion of Tax Map 157-00-02-043" received by Planning Staff October 15, 2012, prepared by Black River Land Surveying, LLC.
2. Annexation into the City of Sumter shall be completed and/or written confirmation the public water and sewer utilities will be provided to the development prior to final plat approval for the first phase of development.
3. Overall landscaping shall be provided in accordance with the submitted landscape plan titled, "Proposed Landscape Plan for 108 Lots Portion of Tax Map 157-00-02-043" received by Planning Staff September 5, 2012, prepared by Black River Land Surveying, LLC. In addition to the following:
 - a. Street Trees – every dwelling shall have one canopy tree, a minimum of 2 in. caliper in size, planted within 10 ft. of the front property line.
4. Timeline for installation of landscaping:
 - a. *Deschamps Rd. Street Front Planting* – all street front buffer plantings shall be installed prior to final plat approval for the first phase of development.
 - b. *Primary Subdivision Entrance* – all specified plantings shall be installed prior to final plat approval for the first phase of development.
 - c. *10 ft. Buffer on the North and South boundary of the development* – these buffer areas are comprised of existing vegetation. These areas are not to be cleared, Final certificate of occupancy shall not be issued for any individual lot until the buffer area is inspected and found to be in-tact, should existing vegetation be removed during construction, said buffer area shall be replanted prior to issuance of CO.
 - d. *Community Open Space/Stormwater Management Areas:*
 - i. Designated green space and stormwater management areas within the development shall be planted in accordance with the submitted landscape plan. Green space/stormwater management areas shall be planted with appropriate vegetation prior to final plat approval for any given phase of development.
 - e. *Street Trees* – No individual dwelling will be granted a certificate of occupancy until the required street tree has been planted.
5. Timeline for Sidewalk Installation:
 - a. Sidewalks shall be installed at time of construction of each individual dwelling. Final Certificate of Occupancy shall not be granted on any lot where a sidewalk is required but has not been installed.

- b. Final plat recordation shall follow the phasing proposed on the preliminary plat. All sidewalks shall be installed for each phase of development prior to final plat approval for any subsequent phase.

6. Timeline for Pedestrian Trail Installation :

- a. The pedestrian trail shall be graded and installed prior to issuance of final plat on Phase III of the development in the location shown in the graphic below.



Seen and agreed:

Tyler B. Dunlap
 Tyler B. Dunlap
 Dunlap Properties, LP

10/18/12
 Date

Louis W. Tisdale
 Louis W. Tisdale
 Black River Land Services, LLC

10-18-12
 Date