



**ATC Associates of North Carolina, PC**

**2725 E. Millbrook Rd Suite 121 Raleigh, NC 27604**

**Phone: 919-871-0999 Fax: 919-871-0335**

**[www.atcassociates.com](http://www.atcassociates.com)**

August 8, 2008

Mr. Mark O'Neal  
Pickett-Sprouse Real Estate, Inc.  
3805-A University Drive  
Durham, NC 27717

***RE: Roadway Data for Starterwoods Lane of Treefarm Subdivision in Chatham County,  
North Carolina\_ATC Project Number 45.35390.0003***

Dear Mr. O'Neal:

As requested, ATC Associates has completed the necessary NCDOT roadway testing for the above referenced project. Based on our test results, NCDOT requirements have been satisfactory met with regard to the ABC stone and asphalt compaction.

The soil sub-grade was proof rolled prior to placement of ABC stone. Areas observed were found acceptable for the placement of ABC stone.

Density testing utilizing the Nuclear Gauge (ASTM D-2922) Method was performed on the ABC stone with satisfactory test results. ABC stone depth was checked in 5 locations and found to meet or exceed job specifications. The ABC stone was proof rolled and found acceptable for the placement of asphalt.

The asphalt (SUPERPAVE asphalt mix RSF9.5A, provided by contractor) was tested for density utilizing the core method. ATC obtained 5 cores for density and thickness testing. Locations were obtained by the Random Numbers Method. Density test results were found to meet NCDOT requirements at the locations tested. In addition, ATC provided an NCDOT Certified QMS Roadway Technician to observe and perform testing during asphalt placement. Utilizing a thin lift nuclear gauge, test results indicated the contractor was achieving satisfactory compaction based on the rice value provided along with the job mix formula. Core thickness ranged from 2.2 to 2.4 inches, averaging 2.3 inches.

If you have any questions concerning the information in this report, or if we can be of further assistance, please do not hesitate to contact us.

Sincerely,

**ATC ASSOCIATES, INC.**

A handwritten signature in black ink, appearing to read 'Benjamin V. Wilson'.

Benjamin V. Wilson, PE  
Sr. Engineer / Geotechnical Services Manager



A handwritten signature in black ink, appearing to read 'H.L. Tooie Hales II'.

H.L. Tooie Hales, EI  
Construction Services Manager

Attachments: NCDOT Test Data Sheet  
Core Location Diagram



ATC Associates Inc.  
 2725 E. Millbrook Rd Suite 121  
 Raleigh, North Carolina 27604  
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### Roadway Certification Data

Project Name : Tree Farm - Starterwoods Lane  
 Project No. : 45.35390.0003

Date : August 8, 2008

Station	Subgrade	ABC Stone		Asphalt			
	Density *	Density **	Thickness	Core No.	Type	Density ***	Thickness
4+50		100%	8"+				
9+50		100%	8"+				
14+50		100%	8"				
18+50		100%	8"+				
21+63		100%	8"+				
				1	RSF 9.5A	147.2 (95.6%)	2.4"
				2	RSF 9.5A	140.9 (91.5%)	2.3"
				3	RSF 9.5A	149.3 (96.9%)	2.2"
				4	RSF 9.5A	144.8 (94.0%)	2.3"
				5	RSF 9.5A	138.5 (89.9%)	2.3"

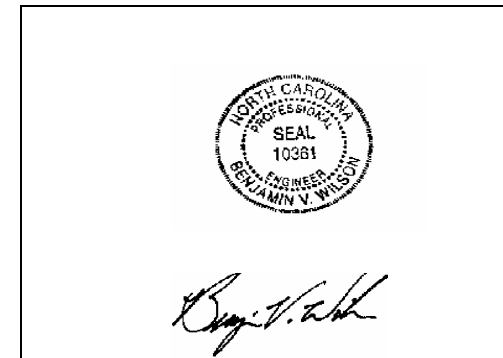
January 2002 NCDOT Standard Specifications for Roads and Structures

\* In accordance with Article 500-2C

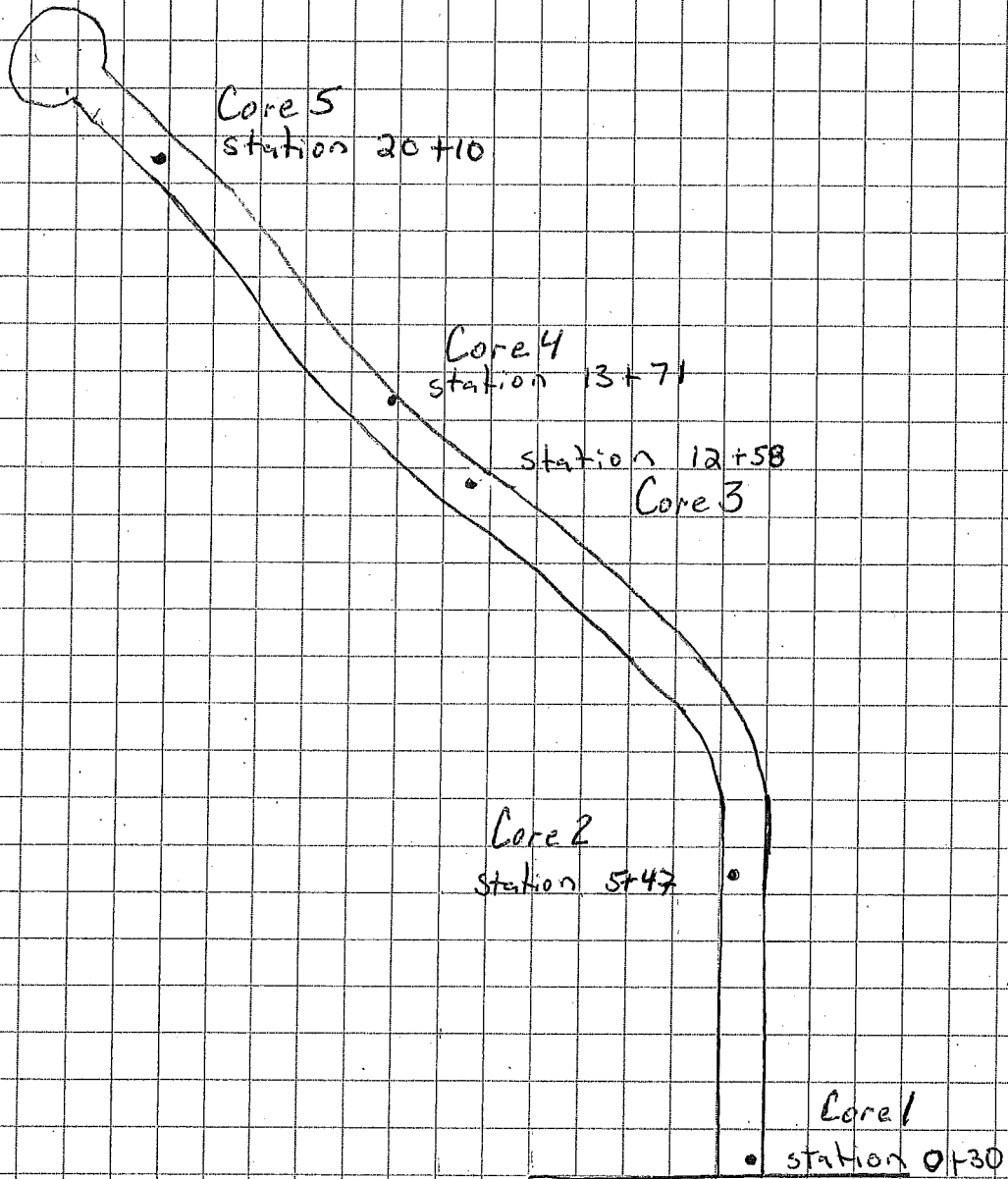
\*\* In accordance with Article 520-7 or 520-9

\*\*\* In accordance with Division 6

Attachment- diagram of roadway layout and approximate core locations



Starterwoods Lane  
Core Locations



Drawn

Checked

Revisions



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Raleigh, NC 27604  
Phone: (919) 871-0999 Fax: (919) 871-0335

Project No.

45,35390.0003

Date

OAI No.